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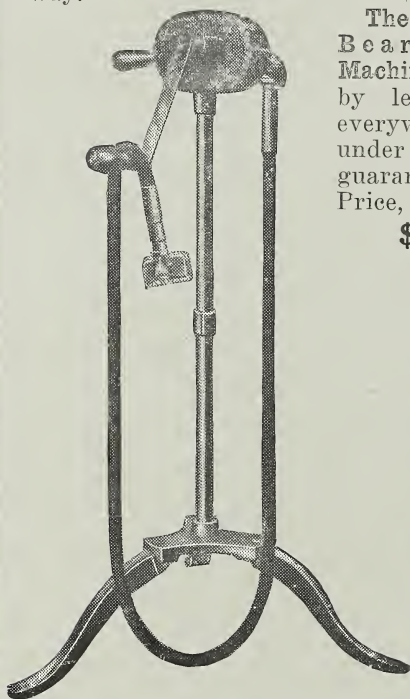
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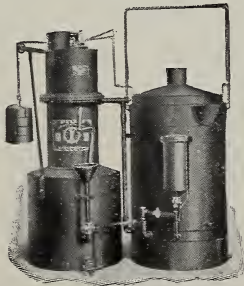
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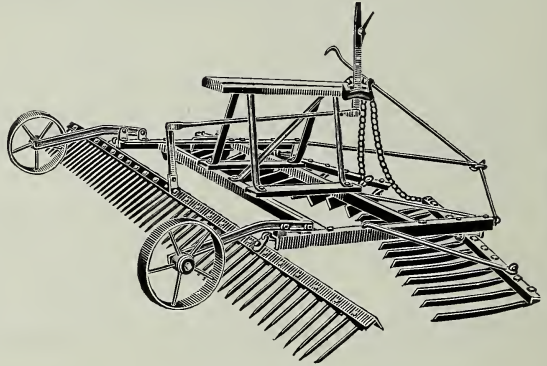
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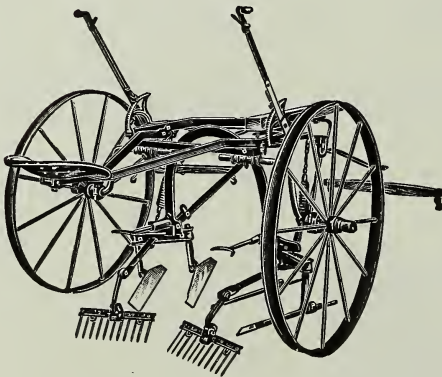
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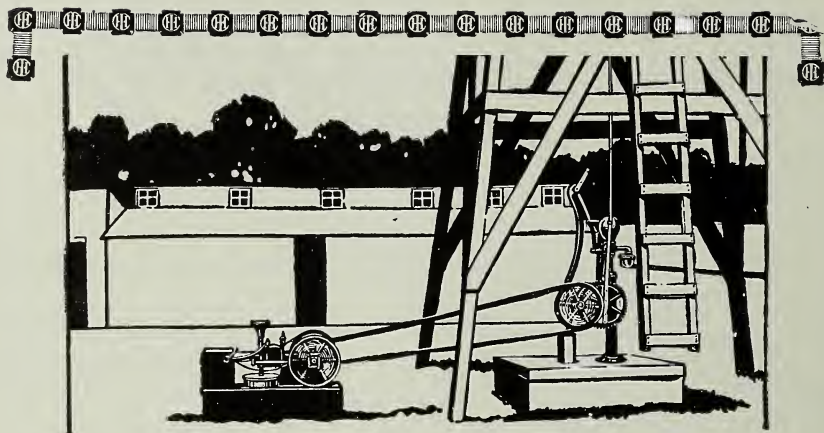
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Sweet April! Many a thought
Is wedded unto thee, as hearts are wed;
Nor shall they fail, till, to its autumn
brought,
Life's golden fruit is shed.

—Longfellow



THE AGRICULTURAL STUDENT

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No. 8

The Selection of the Stallion

J. H. S. JOHNSTONE
Chicago, Ill.

FARMERS generally pay too little attention to selecting the best sires with which to mate their mares. There is just one way to continue the improvement of a farm's equine stock, and that is to breed always in line and to choose a better sire for each succeeding generation. When a farmer begins his work of grading up and finds his mares of the ordinary farm variety, say 1,200 to 1,350 pounds in weight, he will succeed best by breeding them to a stallion which in similar flesh weighs no more than 1,700 pounds. Nature abhors a forced union of widely differing types. It is a great mistake to breed 1,200 pound mares to ton stallions. There are always more misfits than good ones among the progeny from such matings.

With first-cross mares weighing 1,500 pounds, which may be obtained according to the foregoing formula, choose a stallion weighing not more than 1,800 pounds in fair flesh. From such unions, mares big enough to mate with stallions weighing 1,900 pounds or over will be produced and the fillies may be mated with stallions of any weight.

Weight, however, should never be the sole guide in selection. A big, rough, three-cornered brute, no matter if he weighs like an elephant and towers like a giraffe, is never worth breeding to. The old gag about choosing a stallion extra good where a mare is weak is all nonsense. A mare with any very weak point should not be bred at all. Unless

the mares are uniform in size and conformation, don't try to breed them all to one stallion. Investigate each available stallion's colts and be guided somewhat by them. Under no consideration should you use a stallion with a long, weak back or a short goose rump, or one that is thin through the stifles or coarse and puffy about his hocks. Eschew likewise the stallion with short back ribs and, if the object is to breed drafters, be very shy of the light-boned, coachy horse that can set the dooryard fairly afire with the splurge he can make at the end of the rope.

No matter what the mares are like, breed them to stallions that are of approved conformation and the more high-qualified and dressy in appearance the better. If you are determined to breed a mean, sour-headed, long-backed, slab-sided mare, don't pick out for her the cheapest horse you can find. Instead, breed her to the best stallion within reach, but better still don't breed her at all. Take each step by itself and don't try to span too great a chasm all at one jump. It is impossible to raise ton geldings from small mares. You could never do it in 1,000 years if you had a stallion as big as a cornerib and as heavy as a mogul locomotive. Pick out the stallions that are strongest in the most essential points and send the mares to them according to their dimensions.

Under no circumstances buy some scrubby, little pure-bred colt and breed your mares to him, thinking it will save you time and money. A stallion of that description is dear at a gift. Don't stultify yourself by breeding your mares to such and such a horse because he is owned by your brother, your cousin or your uncle. The man who does that sort of business, irrespective of the horse's fitness, hasn't sense enough to last him over night. Don't go into a company to buy a stallion just to be a good fellow and then breed your mares to the company horse, if he doesn't suit them, merely because you have a few dollars tucked beneath his hide. Don't accept the services of some poaching scrub simply because his owner is willing to ride him lame searching for mares at any sort of a fee from a feed of oats and night's lodging to a five-dollar note. Don't breed to a grade at any price and fight equally shy of the pure-bred scrub.

Don't change breeds, weaving in and out with first a coacher, then a drafter, and later on a trotter. Every time you cross the blood you make it harder to breed a good one. Don't pay any attention to loud talk about any stallion. Demand to be shown the papers, and if they don't look just right, note down the particulars and write to the Secretary of the State Stallion Board. There are a few bogus registry associations among us yet. Don't be persuaded to use a bay, brown, roan or sorrel Perche-

ron. There are pure-bred horses of those colors, but greys and blacks are the standard and no one likes sub-standard goods when the right thing is available. Don't use a pig-eyed, chuckle-headed stallion with his neck set on wrong side uppermost. Don't breed to a blind one, no matter how flowery a story may be told to account for his sightlessness. Disposition counts for a great deal in a horse after all. Don't breed to a stallion that throws one forefoot in front of the other—"plaits his forefeet," as the Scotch say. That little trick is invariably transmitted.

Finally, remember that nature has a nasty habit of transmitting the bad points to the exclusion of the good. Don't jew the stallion owner down to the lowest possible notch. Be a sport and let the other fellow make a dollar once in a while. Rest assured it pays. Return the mares regularly for trial. Give the stallion owner the same chance to earn his money that you demand for yourself. Pay the stallion service fees when they are due. Don't let them go until the fillies are old enough to breed and then, for very shame, take them to some other man's horse. Follow the good old golden rule a little ways anyhow.

Watch your mares carefully at foaling time, feed the foals all they will eat and when the horse-buyer comes around, if you can't sell him something yourself, help your neighbor to get some of his loose change.

**"So did this horse excel a common one
In shape, in courage, colour, pace and bone."**

**"Round hoof'd, short-jointed, fetlocks shag and long,
Broad breast, full eye, small head and nostril wide,
High crest, short ears, straight legs and passing strong,
Thick mane, thick tail, broad buttock, tender hide,
Look, what a horse should have he did not lack."**

—Shakespeare.

What Ohio Farms Need Most

H. W. VAUGHAN, '08, '09
Iowa State University

OHIO needs less wheat, fewer elevators, less inferior live stock, and less of the habit of doing what had been done before only because it has been done before. Ohio needs greater faith in live stock, more alfalfa, more silos, more pure-bred sires, better live

the time is gone forever when the Ohio farmer can produce beef, pork and mutton at a profit.

Prior to 1860, Ohio produced considerable beef, but when the western country began putting cheap beef upon the market the corn belt farmer



"THE RESULT OF GENERATIONS OF BREEDING, SELECTION AND CARE."

—Courtesy Crouch Bros.

stock, and more live stock, especially more beef cattle, mutton sheep and hogs. Ohio needs cheaper farm loans and co-operative buying and selling, it is true, but most of all Ohio needs better live stock and more of it.

Some people have the idea that the only kind of live stock farming which should be advocated in Ohio is dairy-farming. There seems to be a notion that

could not compete with it. Now the western country is nearly settled up, cheap beef exists only as a fond memory, and the time is ripe for corn belt farmers to renew beef making activities. Iowa and Illinois are getting back into the breeding business extensively, and Ohio should profit by their example.

Prices for pork and lamb have been

elevated in sympathy with the beef market and students of live stock conditions agree that prices for all live stock products will remain at a high level and with less fluctuation than heretofore.

The argument that soil fertility is best maintained and increased by dairy farming is all right so far as it goes, and the fact that there is an increasing demand for dairy products is a good argument in favor of dairy farming also. But the mistake should not be made of assuming that soil fertility cannot be increased and that money cannot also be made by growing beef, pork and mutton. Many localities in the state have no market for dairy products, others are handicapped by labor conditions, and some farmers prefer some other kind of live stock rather than dairy cattle.

The dairy enthusiast will figure for you the few cents worth of fertilizing elements removed from the land by the sale of butter, and will show you that no other kind of live stock farming removes such a small amount of fertility. True. But we cannot all be dairy farmers. We cannot live by milk, butter, cheese and veal alone. At least we prefer not to. Beef, pork and mutton must come from somewhere, and if the Ohio farmer can produce meat at a profit he should by all means do so, because Ohio soils need not only the help of the dairy cow, but also the help of every kind of live stock which can be produced thereon profitably.

There is every reason to believe that the breeding and feeding of many more beef cattle, hogs and mutton sheep on Ohio farms would be profitable today and for a long time to come. Illinois and Iowa are producing vast quantities of meat at a profit on land which sells at \$125 to \$225 per acre. This they are

enabled to do because of their faith in the silo, alfalfa, and good pure-bred sires.

Furthermore the idea that Illinois and Iowa farmers are soil robbers does not prove out upon investigation. Most of the farmers from Illinois and Iowa came from states farther east where the soil had not been properly cared for, and they are profiting by the mistakes of their fathers. While conditions in the newer corn belt states are far from ideal, the writer asserts that these people are not mining their soil fertility in any such reckless manner as Ohio farmers have done in the past and in many instances are still doing today; but instead are growing crops to feed, feeding them, and applying the manure to the land.

They have abiding faith in good live stock. They recognize the vast difference between a good animal and an average animal. They are not valuing animals primarily as sources of fertilizer, but as sources of financial profit. At the same time they are not overlooking the fertility benefits of live stock production.

An authority on middle western farming has said that alfalfa and the silo will double, or nearly double, the live stock carrying capacity of the average corn belt farm. Ohio grows alfalfa successfully and also grows more corn per acre than any other corn belt state. Ohio is nearer the ultimate market than are the states farther west, and better prices are therefore realized for her products. The idea that dairying alone is advisable should be revised to meet modern conditions, and not only dairying, but also all phases of live stock production should be encouraged by all persons interested in the welfare of Ohio Agriculture.

“Food or Clothing—Mutton or Wool”

H. E. ALLEN
'09 Purdue University

IT has become a matter of common knowledge that the sheep industry does not enjoy the popularity of which it is worthy. Just how long this condition will exist is uncertain. However, in view of the facts that flock husbandry is one of the oldest and has been the most important phases of rural life for centuries in many countries and that the variations in the national wealth of these nations has, in a large way, been dependent on the prosperity

realizing as they did, that their great flocks and woolen industries were the direct source of their national wealth and power.

The sheep business of the United States dates back to the beginning of her agriculture. So important and so necessary were sheep to the physical and industrial welfare of the early settlers, that they established little flocks as early as possible to supply both food and clothing to their families. How-



CHAMPION RAM AND EWE—HEART'S DELIGHT FARM.

—Courtesy American Sheep Breeder.

of their flock husbandry, it is reasonable to believe that the present slump is only temporary and that the industry will come to its own in the near future.

From the very beginning of time, the sheep has been man's constant companion. Biblical history implies that the possession of sheep was an indication of wealth and power. The classical writers of Greece and Rome often spoke in their agricultural writings of the value and importance of flock husbandry. Later historians have told us how zealously the Spanish rulers guarded the Merino sheep of their country,

ever, it is not my purpose to go further into this phase of the subject but rather to point out as well as I can the important place among our domestic animals that the sheep has taken, through its products, mutton and wool, in supplying the two most fundamental essentials to civilized life—food and clothing.

I believe that I am justified in saying that in the matter of food production the sheep stands without an equal among the meat producing animals of our nation. I have three reasons for making this statement. First, from the profit standpoint. The English farmer

has long ago learned that in order to derive the greatest possible profit from a farm, a flock of sheep must be kept upon it. An experienced flockmaster of this country has said that if sheep consumed as much hay and grain accordingly as other stock, sold for the same market price, and had no wool, flocks would anyway eventually become numerous on our farms as a money making proposition.

My second reason is based on experiments conducted by the U. S. Department of Agriculture and recently published in a bulletin showing that mutton is more highly nutritious and digestible than are other meats. The fuel value of mutton as a whole is 51 per cent greater than is beef. Now a meat may be relatively high in food value and yet may not be available as a food. In other words, it may be indigestible. It is recognized by all authorities, however, that mutton is the most highly digestible of any of the meats derived from the larger animals. This is why the physician always prescribes mutton for the meat diet of their patients.

The third reason is that mutton is more healthful than either beef or pork. The Government inspection of meats in the slaughter houses for the year 1912, brings out the fact that sheep are immune from tuberculosis and other diseases transmissible to mankind. Out of over 10,000,000 cattle carcasses inspected, nearly 77,000 were condemned, either wholly or in part and out of about 27,000,000 hog carcasses nearly 902,000 were condemned in the same way, while out of over 13,000,000 sheep carcasses not any were condemned.

Now let us consider the matter of wool production. As I have said before, food and clothing are the two fundamental essentials to the existence and comfort of mankind. We might

as well do without one as the other. While other sources of food may be substituted in a measure for mutton, to furnish the food supply of the world, there is no commodity that ever has or likely ever will take the place of wool as a source of clothing. The human race has depended on the fleece of the sheep throughout the ages, and since the flock is the main source of supply, the sheep and wool industry must and will eventually command a high place among the industries of the country.

If what I have just said regarding the certain permanency of the industry is true, someone may ask: Why is it that the business has so materially decreased and suffered from a lack of confidence during the past few years? There are many reasons that might be advanced as lending their influence in bringing about this condition. The uncertainty of the tariff system is often suggested as one reason. Probably the tariff has caused fear among many sheepmen. There is one thing certain in this connection, however, and that is that the tariff has little to do with the present high price that we have to pay for woollen clothing.

Another reason that might be advanced is the low prices that have been paid for wool during the past few years. The sheep business has its ups and downs like any other business but the wool growers themselves are largely to blame for the low income received for their wool. In many instances it has been a low grade product that they have dumped onto the market.

In the first place, the wool growers have neglected to select breeding animals with fleeces of proper density and length. Secondly, they have failed to care for their flocks so that clean strong wool was not produced, and thirdly, they have been very careless

in the way they have put their wool on the market. The latter neglect includes the all too common evils such as the presence of branding paints on the wool; insufficient tagging before shearing; tying the fleece with improper twine; lack of sorting; the appearance of black fibers among the wool; and especially in the corn belt states, the malicious dishonesty in packing in which the frequent occurrence of lamb's tails, sheep's heads, stones, bricks, and all sorts of foreign materials appear in such quantities as to indicate that their presence is not due to accident.

However, I am glad to say that the signs for better conditions in the wool and mutton industry are encouraging. The various states are organizing active wool and mutton growing associations, and the great woolen mills and ware-

houses of the country are vying with each other in their attempts at educating the people to better methods in producing a higher class article. Also conditions indicate that the present is a good time to get in the business for breeding stock is now comparatively low in price. Sheep are always a profitable adjunct to good farming. Americans are acquiring a discriminating taste for mutton, and woolen clothes will be worn for centuries to come. Therefore, the future of the industry, whatever the immediate outlook, must be attractive to those who can see beyond the horizon of today. While others are rushing out of the business the thoughtful, wise man will quietly step in, and when brighter days come, as they inevitably will, he is in a position to reap a handsome reward for his shrewdness, courage and faith.



CHAMPION YEARLING WETHER
OWNED BY CAMPBELL.
—Courtesy Am. Sheep Breeder.



CHAMPION CHEVIOT EWE, OWNED BY
RALPH POSTLE.
—Courtesy Am. Sheep Breeder.

Notes Afield Among Stockmen Along the Mediterranean

PROF. CHARLES S. PLUMB

THE habits and customs of people in other countries naturally differ from our own. In fact, we find wide differences in sections of our own country not greatly separated. Over here in Italy and France, one is far removed from Ohio ideals and methods. Undoubtedly in Italy the stockman is following many of the same customs of his forebears of a thousand years ago. The antiquated harness, the heavy cart, the type of animal, all suggest the dim, misty past. What would you think to see flocks of goats driven about the streets of Naples, and stopped here and there to be milked for an ultimate consumer? Or how would you be impressed to see cows tied in front of a church in a big city, lazily chewing the cud, awaiting milking time, and the approach of the man with the can? One stops and stares, and then passes on to see something else that is new and strange.

People over here are not ashamed to associate with their stock, to say the least. One finds them in all sorts of unexpected places. A herd of a dozen cows may be lying comfortably in a stable in the heart of the town, with the family living upstairs, and you quite unsuspecting. Goats over here are a common feature among the poor, and they are well cared for in some out of the way corner about the place. Recently I was one of a small party driven to shelter from rain in the little old stone town of Dolceaqua, a place dating back into the middle ages, with narrow, dirty, unsanitary streets, and houses unlike anything you can imagine. Yet as one passed along the sunless streets, which are hardly three paces wide, the

braying of a donkey or the timid cry of a goat is often heard. As we clustered under an earthquake arch to avoid the rain, an old dame came along with a pan of bran, opened a door nearby, and at once two splendid nanny goats had their noses buried in the feed. The old lady was justly proud of her beauties, Methinks that she might the better see methinks that she might the better see the queer people stranded in that out of the way place.

All over Italy among the mountains, and especially the Maritime Alps, one finds small, so-called stone towns or villages. They are often located on hill-tops, or high along the mountain sides, and the houses are quite high, and are arranged in groups, with an exterior reminding one of a city wall of defense. To reach the interior of this type of town, one must enter through narrow gateways, and then pass along equally narrow streets, through which the sun often sends no rays. Some of the streets are very steep, and they are found in all kinds of slopes. This sort of a town always has a church and a public square, known in Italy as a piazza. These towns are many of them far removed from good highways and railways. In fact, mule paths are the only arteries by which circulation of trade reaches them. If one is in a Mediterranean shore town, he will see donkeys, with loads on their backs, either coming from or en route to these quaint villages populated by peasant farmers and tradesmen. The donkey is intimately a part of the life of these people. He climbs the steepest hills, picks his way into the sharpest descents, and never loses his equilibrium. He is always pa-

tient, nothing but a flop of the ear indicating change of expression. The Italian loves a long lashed whip, which he snaps like a pistol shot and with much the same glee that a youngster touches off a fire-cracker. And this whip he never hesitates to use on donkey, mule or horse. The latter cringes and struggles ahead, but the donkey, philosopher-like, continues the even tenor of his way. He knows that he is the electric road, the train de-luxe, the limited service of the mountaineer, and he controls the situation, whip or no whip. Little donkeys not over nine hands high will climb the hillsides with kegs of wine, sacks of grain, bags of manure, loads of hay from which only their heads and legs appear, or various and sundry other things, though mind you these are not all on one donkey. Even in town, where he is hitched to a cart, in front of which he seems a mere pigmy, he hauls a man or two and great unbelievable loads of merchandise; and ungrateful man, in this sun-beaten, up-and-down hill land, never knows when he has put on the last straw. This applies to all stages of mule development; in fact, from the little burro to the great, drafty mules that are no uncommon sight in Northern Italy, the finest mules I believe in the world.

The country along the Mediterranean, at least along the Riviera, is a warm one, frost being uncommon, even in winter. In the towns, however, the cabman keeps his horse well blanketed, in fact nowhere in Ohio will one see more blanketing done to the horses in winter than occurs here in this warm place, where overcoats are often a nuisance. Why it is that these drivers, who never hesitate to thrash a horse, blanket them so warmly and completely? It is a puzzle to me, for the head and ears are often also covered with cloth. In some

places the blankets are of bright colors, such as red, and the drivers, I actually believe, take more pride in the blankets, the tassels and bells, and the brass work on the harness than they do in the living flesh that furnishes motion and power. It is a little singular, but my observation has been, that the people who decorate their animals with such trappings the most, are the ones who love them the least. The real lover of a horse calls for simplicity and quality in equipment, preferring that his steed shall stand forth as the one object demanding admiration.

One might easily go the length and breath of this region and not even suspicion the presence of a hog—other than of the human type. But the genus *Sus* is a rare one here, if my eyes deceive me not. Yes, I have seen him, but he sneaks about in corners as though ashamed of himself, and from the looks of the meat shops, one might assume that only Jews bought the meat therein.

Among the most picturesque features of this land of blue sky and indigo sea, are the flocks of sheep grazing on the hillside among the olive groves, or nibbling the herbage of the wider pastures of the lowlands. Sombre looking shepherds, invariably clothed in caped overcoats and attended by rough-coated, fierce-looking dogs, keep the sheep within bounds. In some sections great flocks prevail, as for example between Rome and Pisa, while even in the mountain districts one finds flocks of one to two hundred head. The sheep show the influence of the long-fleeced, white-faced breeds, though usually badly mixed in breed character. Among these flocks will be seen various shades of dark fleece, up to a very distinctive black. A few goats are found in most herds, being grazed for villagers who desire the benefits of pasturage. The wool must

be a motley lot in grade, and should have its largest market right at home in Italian mills. The people in this region are great mutton and lamb eaters. This is one of the most popular meats served in French and Italian hotels and restaurants, and wherever one goes through this country are to be seen the carcasses of sheep and lambs. Goats also are eaten more or less, and one sees kid carcasses here and there among the lambs. The mutton is rarely heavily fat, but beautiful carcasses are seen on the hooks in the shops.

One never sees the sheep afield without an attendant and dog, and thus they are kept under supervision and safety. The ravages of dogs here are very minor factors. When one thinks of it, isn't it strange that in enlightened America, among a proud, boastful people, we seem unable to do two things; viz, keep our sheep from the damages of dogs, and collect dog taxes? Why don't we have the courage of our convictions and dispose of the dog question the way people do in other countries, by making the dog less important than the sheep?

The poultry man of Italy is not to be

regarded lightly as a producer of food. All over this country one sees many excellent fowls, Leghorns predominating. I have seen many beautiful Leghorns of different varieties, although these people keep mixed stock very generally. Fowls are a popular article of diet, and are on sale in many shops. Chickens are kept in all kinds of places, here, ordinary woven chicken wire being commonly used. The most unique poultry houses to come to my attention were on the tops of houses in Genoa. The houses of Italy are nearly always flat roofed. In Genoa many have nice tile roofs, with flower gardens and poultry yards thereon. As this city is very hilly, with bridges passing across sections of streets above the houses, it was very easy to see the tops and the poultry yards. Yet poultry is universally kept, and in some localities one finds occasionally a commercial poultry plant.

This Mediterranean borderland is not the paradise of the stockman by any means, but it is in some way a capital place to sun one self in, and in between times the live stock conditions prevailing will prove interesting.



“Your Mission”

L. A. WEBSTER

“American Sheep Breeder,” Chicago

VIRGINIA, home of the Cavaliers and the “mother of presidents,” land of green hills and blue mountains, land where all nature has been kind and genial to her people. Here the pioneers built homes as they built character—beautiful and strong. White, palatial mansions crown the heights of Mt. Vernon, Arlington, and Monticello where a Washington, a Lee, and a Jefferson looked out through white portals upon fair fields, green hills, and matchless blue of the Alleghenies. It is a dream land with a legendary history as enchanting as the skies or her mountains, and as strong as the sterling manhood of her famous sons. The writer traveled over three hundred miles of the picturesque land, but he did not discover another Washington, nor a Lee, nor a Jefferson. Weeds, brush and briars have overgrown those fair fields and the Virginian of today sat by the wayside smoking his pipe or he was leisurely driving for pleasure. Have you discovered this condition and what has brought it about?

The writer also journeyed through New England—homeland of the Pilgrims. Verily, it was a stern and rock bound coast where the Pilgrims landed, but they were men of rock as stern and rugged as the everlasting hills of their native land. They cleared those rock fields of their giant bowlders and built great rock fences. They built substantial homes and planted graceful elms and maples. They set the white church on the hill and the school house at the cross roads. This is the country that produced men—great statesmen, great writers, great commercial men—a strong and mighty race, morally, mentally and physically.

Again the writer traveled through the Western Reserve of Ohio, a country that must have thrilled the hearts of the early settlers with its picturesque beauty and its valuable resources. It was a strong and sterling race that hewed out the early houses among the forests of oak and hickory in Ohio, the country that produced men like Stanton, Giddings, Garfield and McKinley. I asked the man who was driving with me whether there were any tanners' sons or any rail splitters coming up in these homes of ease and luxury. Are these young men making the strong men their fathers made? He shook his head and replied, “No, they are not.” Most certainly not! The only way to make a strong man is to make him responsible and self-reliant. He must conquer the great mountains of adversity, the great problems and temptations of the twentieth century.

Not long ago a young man in Ohio told me he was about to land a position whereby he could draw a good salary and not have much work. This he thought was a smart thing to do, “to land a cinch.” That may be smart but it is not the manly thing to do. It is not a worthy ambition for a patriotic young son of Ohio. The young man that is looking for a soft job will be a soft man. Who is going to carry your burdens for you through life? Who is going to ache and toil for you? Who is going to carry your cross up Calvary Hill? To carry your own burdens and help your brother is manly and magnanimous; to shirk them or impose them on a weaker brother is cowardly. In Kentucky a few days ago a young man spoke to me about Abraham Lincoln's mission, stating that he believed

the Lord had a great mission for Lincoln. Again the next day a man said to me that he thought Lincoln was created for a purpose. "Yes," I replied, "and he accomplished it." Why do you talk to me about Lincoln's mission? What is your mission, is the great question that concerns you. You say you have no great work. But remember every man's mission is just as great as he wants to make it.

Not long ago a young man asked me why we had no more Lincolns or Washingtons. Because we have no more fathers and mothers like those of Lincoln or Washington. When we do we shall have more men like them. Near me recently in a Chicago church under a great hat sat a young lady with face painted, chewing gum. She will never make a Francis E. Willard or a Julia Ward Howe. Neither will she raise a Washington—slight, fashionable, face-painted, gum-chewing girl. Some men, however, vindicate themselves and present conditions by stating that times have changed and we do not have the conditions that demand a Washington or a Lincoln. But never in the history of the world did we need such men as we do now, in social, political and business life.

We have been advocating much of late the conservation of the American soil, forests and other resources. The policy is admirable but we should also advocate the conservation of oak and hickory fiber in the moral, mental and physical make up of our young men and women. We have been feeding our boys and girls the frosted cake of aristocracy, basswood pills of self indulgence and ease when we should develop moral and mental fiber of oak. I am told that our boys are educated away from the farm, but the farmer himself is often responsible. He has acknowl-

edged to the boy and to the world that his occupation is menial, because the city had told him it was. Instead he should inspire his boy and teach him that agriculture is the most honorable position in the world.

It is not the profession that makes the man famous. It is the spirit with which he comes into it. You may turn the sod with your plow and be brother to the clod you turn or you may be a Washington or a Lincoln. You may be clerk in a dry goods store and be as broad as the world or as narrow as the tape you sell.

Many of our young men are going down to the city in search of a genteel position and to "see the sights." Not long ago I looked out over fair fields and green hills at the golden sun-set in Ohio—a glimmering sheen of gold and silver and purple, making a beautiful and wonderful picture. And yet our boys are going down to the city to see the "nickel picture show." I would travel two thousand miles to sit again on the old door step of my native home and listen to the wildest, sweetest song in all the world, the evening call of the hermit thrush. And our boys are going down to the city to listen to the jingle of the "five cent rag time." Have you discovered the matchless green of your own meadows and hills? Have you caught a glimpse of the beauty and mystery of God's wonderful creation for your home?

The rush of life is so intense that we are missing some of the best things in life, chasing by the "good, true and beautiful" in our craze to go faster. "Stop, Look and Listen" is a sign at the railroad crossing in Ohio. My brother, take time to think, listen to the song of the poet, forget sometimes the noise and roar of commerce and materialism. The world needs a great heart like

Lincoln's more than it does a wireless or a limited moving at sixty miles an hour.

Uphold virtue, truth and honor in your fellow men if you wish these virtues to prevail. When you hear the statement that "every man has his price," rebuke the man that makes it. When the Louisiana Lottery was seeking a man of national honor and reputation to place at the head of that gambling institution to make it respectable in the eyes of the world, they finally settled upon Robert E. Lee, hero and patriot of the Southern army. Their committee waited upon him and offered the gray veteran a salary of ten thousand dollars. The great general listened to their offers and then replied "All that I have has been sacrificed for my country. The war has left me penniless. All that I have left is my name and my honor, but you cannot buy it for ten thousand dollars." There are

some men you cannot buy and the more we teach the principle the more we shall inspire honor that will not sell.

Away down in the Walloomsac Valley in Vermont stands a great stone shaft rising over three hundred feet. It is the tallest battle monument in the world and was erected to the memory of the Green Mountain Boys who lived and died for their country. But, never in history did our country need more the service of unselfish men, men of sterling honor and integrity. This is your opportunity. The world's greatest men have been raised on the farm—her famous soldiers, her great writers, and her statesmen. Ohio's strength lies not in the wealth and influence of her cities, but in the moral, mental and physical strength of her yeomanry. I can bring you no better message than to urge you to achieve and maintain an agricultural life and character that shall be pleasing to your state and fellow men.

Rural Credit Legislation

DEAN H. C. PRICE

Several bills to provide a better system of agricultural credit for the American farmer are now before Congress. The Moss-Fletcher bill embodies the recommendations of the Commission that was appointed by the President and sent to Europe last summer to study rural credit institutions. It provides for the establishment of a system of "National farm land banks" that may be either joint stock companies or co-operative. The desirable features of the European institutions have been adopted to meet American conditions to a remarkable degree in the proposed legislation and if the Moss-Fletcher bill becomes a law it will have a far reaching effect on American agriculture.

Another bill that is attracting considerable attention and has the support of the National Grange is the Bathrick bill introduced by Congressman E. R. Bathrick of Ohio. This bill provides for direct government loans to farmers at a rate of interest not to exceed $4\frac{1}{2}\%$, the money to make the loans to be provided by the sale of United States government bonds. It is not likely that any bill providing for direct government loans will be enacted into law. In the European countries this system is not regarded with favor and has not proven satisfactory.

The Moss-Fletcher bill has the support of the administration and will probably be passed before Congress adjourns.

The Future of the Pleasure Horse

DONALD R. ACKLIN
Perrysburg, Ohio

SOUNDS easy, doesn't it, but many indeed are the men who would give all their old horseshoes to know just what lead Fashion will take regarding horses in the next few years. The one best bet seems to be the saddle horse and, with all of the discussion about what sort of a horse we shall ride, the fact is that riding holds its own and the field which it occupies can never be invaded. There are just as many people today who love horses as there were ten years ago, but the mode of expressing that feeling has changed until now the modern Horse Show affords the principal place for the display of the pleasure horse in his highest estate. Under existing conditions the light-legged horse cannot be taken seriously from a commercial standpoint, so he has been put upon a pleasure basis and there he thrives more or less, depending upon local Fashion for his living.

At the present time hunting is in great vogue in many of the eastern and southern states and it seems very probable that the future will see much more of this fine sport. Here in Ohio there are several hunt clubs on a very flourishing foundation and at all of the horse shows the hunter classes are the ones that attract the most attention, except perhaps the jumping classes, and these really are composed of hunters.

The hunter is the one kind of a pleasure horse in which beauty, though desirable, is not a requisite. Rather does one look for courage, intelligence, breeding and performance, and of these intelligence may perhaps be considered of first importance. The good hunter will show a long neck, withers standing well back and fore legs well forward

at the girth; he must have great chest capacity and strong hind quarters to carry him over the jumps. The accepted type of hunter leans to the thoroughbred and is very distinct from the harness type. He may have thoroughbred blood in him, and probably has, but the principal qualification of a hunter is that he should jump, and jumping is something that is born in the individual horse, depending not so much on breeding as upon the union of courage with a certain conformation. The best hunters in this country come from Virginia, where natural conditions have made the production of this type of horse favorable. There barbed wire fences are not known, many of the farmers ride to hounds and the hunter is the general type of light-legged horse to be found. He has won this place solely on merit and indeed he deserves it because he is suitable for park riding, he can be driven, used for riding in road work and his jumping qualities put him in a class by himself. If I could have but one horse, he would be a hunter.

While the present tendency of saddle horse judges seems to be towards the hunter type, the park-hack is here to stay. The correct type for this kind of a horse is a subject of some diversity of opinion, but it is generally agreed that the park-hack shall present a more pleasing appearance than the hunter, with a shorter neck better carried, a fuller made body more rounded out and altogether a "smarter" horse. He must show breeding, substance, style and a good way of going, and has been described as a "horse that fills the eye of the layman by his general showiness and yet satisfies his rider by the nice-

ness of his gait and the feeling of pride on being mounted on something that compels universal admiration." He must be well mannered, willing to stand or willing to go as the command may be, and he must look his best under both conditions.

The five-gaited saddle horse will continue to hold favor in certain localities and indeed it would be a pity if he did not, because from an artistic standpoint the American saddle horse is the most

not always a utility animal, but he very often is and under the present classification there is no reason why he should not be.

The number of owners keeping horses just for use in the show ring is on the increase and as long as this condition exists it is up to the producer to supply the type of horse desired, whether for saddle or harness purposes. The high-acting harness horse is practically never seen except in the show ring, but at the



From "Riding and Driving for Women," by Belle Beach. Copyright Charles Scribner's Sons.

beautiful of all horses, but we Americans seem to follow the lead of England in our horse matters as far as sport is concerned, and the five-gaited type has lost many advocates that it otherwise would have.

That horse shows are increasing in popularity there is not much doubt, because it is through this medium alone that many people express their appreciation of the horse—and it is a very good medium, too. The show horse is

larger shows the harness classes are all well filled with good horses and indications seem to foretell that this condition will prevail.

In conclusion, let it be said that "the saddle horse is the thing," whether it be a thoroughbred or five-gaited American saddler: every man likes his own sort of horse, but the horse show does more to mould public opinion than any other agency, and will continue to do so for some time at least.

Duality in Beef Cattle

DR. H. M. BROWN
Hillsboro, Ohio

IF AFFORDS one considerable amusement—and yet it is a source of sad reflection with those who have watched the weary struggle to build up the breeds—to witness the recent antics of some deluded ones in an attempt to unduly exploit the milking qualities of the beef making animals.

All know that the Shorthorn breed has produced some deep milking cows, and it is equally well known that the Angus breed at one time was strictly and successfully a dairy breed of cattle. Even among the Herefords there have been many famous milkers. But all these breeds have been developed by selection for beef purposes, and all can be changed back again into milking breeds by selection if the breeders find it profitable to sacrifice a large part of the beef making characteristics.

Selection for a particular purpose can only be made by disregarding all that which has been laboriously accomplished in the direction of other particular purposes. The sacrifice will necessarily be great and permanent—so great indeed that the wise ones will not, we hope, be led astray by a few impractical and self-exalted persons that have for the moment insinuated themselves into the lime light with a plan that can, if adhered to, work so much harm in the cattle industry of this country, that it will require many years of corrective work to recover from it.

Many light harness horses are good workers and many heavy harness horses show a good active road quality. In fact all modern breeds of horses may be traced to practically a common origin, but by judicious selection they have been developed into various tribes,

with tribal attributes and varying functions to suit the demands of the times. But who would be so foolish as to advocate that the drafter should be deteriorated by selection into a scrub road horse type; or that the highly developed trotter should be bred back into typical draft mongrelism just to gratify the whims of some dreamers with pen and paper, and the favor of a cheap farm press of the community? It can be shown beyond cavil that one may take any of the beef breeds and develop astonishingly the latent milking functions. Especially is that so of the Angus or the Shorthorn breeds, for of these two neither can be said to possess an advantage over the other in that particular. They both have been bred and fed for beef until they, along with the Herefords, have attained preeminence throughout the world for that purpose. However, it has been accomplished largely by disregarding the milking functions as an active quality in their makeup.

To return by selection to the old conditions in an attempt at specialization, as advocated by the dualists, would entail an expenditure of values and a responsibility that no one but the unthinking would dare to assume. Any beef breed will milk well on the average, and any beef breed may be selected for the milking qualities until those functions predominate. But the question is, will it pay? In the light of the accumulated experience of the world, one can hardly say that it will.

The writer is a firm believer of the development of the milking quality of all beef breeds, and most breeders are doing this. But, he also believes that

the senseless attempt to discredit high development of the dairy breeds, and to force a sacrifice of the hard earned attainments of the beef breeders, and to substitute mediocre quality of both, is revolutionary and without excuse.

Certain promoters of one of the beef breeds have enlisted themselves behind a commercial propaganda for the purpose of booming that excellent breed of beef cattle as being the only heavy cat-

tiently, but slowly, regaining the losses thus attained.

Only a few years ago, it will be remembered, the Shorthorn breed was practically ruined by a craze for all red animals. The Percheron horse went through steps backward in pursuance to a similar craze for all blacks. The Angus breeders are threatening to do great harm by demanding that no white hairs appear anywhere on the animal.



PERFECTION FAIRFAX 179767.

—Courtesy Warren T. McCrag.

tle that can produce enough milk to keep their calves from starvation. On the other hand, certain promoters of another breed have decided to call the bluff just to the extent of showing up the scheme in its true light. Of course, all such things are palpable forces and, if persisted in, can do more than work deterioration and discredit upon the breeds, unjustly devolving upon the succeeding generations the task of pa-

And likewise in all breeds of animals the craze for specific family name and antecedents, is working against moral progress. So, with all the different crazes, including the present dual purpose craze, one wonders what stupendous progress might have been made if none of these things had interposed, and we had gone on in a rational way trying to breed good animals to meet the normal and healthy requirements of the age.

The Value of Swine Forage

JAMES R. WILEY

Assistant Professor of Animal Husbandry

THE TIME of the year is at hand for the farmer to think about the forage crops for the swine herd during the summer and fall months. Too often the opinion is held that forage is not necessary for hogs—that gains on swine can be made just as economically in the dry lot as when pastures are used. It is true that the hog cannot make use of large amounts of forage as the ox or the sheep, but it can make use of a small amount of such feeds. Why not consider, briefly, the value of some of the most common pasture crops for the production of pork?

Take, for instance, that most common of all pasture crops, blue grass. Good pasture of this sort utilized by sheep is worth about \$10.00 per acre; by dairy cattle, \$15.00 per acre; by beef animals, \$10.00 to \$12.00 per acre. Compare these figures with its value for furnishing feed for growing or maintaining hogs at \$20.00 to \$25.00 per acre! Surely the comparison shows the advantage of using even blue grass forage for pork production. Although blue grass does not produce as many pounds of pork per acre as some of the other crops which may be used as forage for swine it has the advantages of being available early in the spring, being permanent year after year, and of requiring little or no work in growing. This crop is the most valuable in furnishing forage for swine during the spring and early summer months or during the fall months. During the comparatively dry summer months the forage afforded by such a pasture is not succulent enough. A supplement should always be used in connection with corn for swine on the

blue grass pasture to supply the protein which is lacking in both of these feeds.

Then consider the red clover crop. For haying purposes this crop is worth about \$20.00 per acre—two tons of hay worth \$10.00 per ton. Experimental tests at the Missouri Station and other stations show this crop to be worth \$35.00 to \$45.00 per acre for the production of pork. The crop is highly valuable as a forage crop for hogs because of the large per cent of protein and mineral elements it contains. Young pigs weighing 80 to 100 pounds will make excellent progress on such a pasture and corn, but slightly more rapid and economical gains are made when a small amount of supplemental feed is used in connection with them. However, it is not as important that the latter feed be used as is the case with blue grass forage.

Alfalfa is, perhaps, the most valuable of all the forage crops available for swine. However, there are some objections to this crop the chief one of which is that it does not fit as well into the ordinary farm rotation as clover. Tests at various experiment stations show this crop to be worth slightly more than clover for the production of pork. When using alfalfa for swine forage, care must be taken, as is the case with red clover, not to pasture the growth too closely. It is best to have only ten or twelve mature hogs per acre. A small number like this will, under favorable conditions, leave enough growth to furnish two fair cuttings of hay in a season. This practice not only has the advantage of yielding a hay crop of fair proportions

but it also keeps the growth green and succulent, and hence, in better condition for forage purposes.

Because of the length of time it requires for blue grass, red clover, or alfalfa to attain a growth sufficient to warrant their use as pasture crops it is often of great advantage to raise a crop which will be quickly available. Perhaps, no other crop is better for filling this need than rape. Rape can be sown, at the rate of 4 to 6 pounds of seeds per acre, any time from the earliest seeding season until the first of August. Under average conditions it is ready for pasturing in six or seven weeks.

Experimental work indicates that rape is worth from \$30.00 to \$35.00 per acre for pork production. So far as the amount of protein contained is concerned there is less need to use supple-

mental feeds with corn for swine on rape pasture than is the case with either red clover or alfalfa.

In addition to crops which have been mentioned there are also many other plants which can be utilized for furnishing forage for swine, either alone or in combination with the ones mentioned or with each other. In using any forage crop for swine it must be remembered that they are the most valuable for hogs weighing 80 to 100 pounds. Young pigs, which have just been weaned, do not get sufficient nutriment from corn and forage, and hence, should always be given some supplement to furnish the protein needed for growing purposes. Hogs weighing over 200 pounds, which are being fattened for slaughter, should be fed in such a manner as to avoid the exercise necessary in gathering a forage crop.

The Unknown Quantity in Judging Live Stock

GILBERT GUSLER, '12
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THE SELECTION of animals based upon supposed usefulness, has always existed in some measure. The Greeks gave us the "No foot, no horse" adage, but most rapid strides in the establishment of principles for guidance in selection have been made during the past hundred years. Stockmen have correlated certain external features with the presence of tendencies of value. Logic and reason were brought to bear in explaining the things observed and in deciding in what way the type might be still further changed to advantage. Sometimes mistakes were made in this latter direction and the trail had to be abandoned, so that largely by observation of those animals found desirable and by

the method of trial and error in creating still more improved types, the judging formula has been established.

Accordingly, the lore of the stock judge for the most part is empirical, based on the experience of stock breeders, and exceptions to the principles determining his ratings are numerous. "As a general rule," "Usually" or "Commonly" preface or qualify most of the statements in every discussion of type. Many of the reasons given do not satisfy the thoughtful student of animal form because of obvious inconsistencies, and the query arises, must the judge's art always remain empirical?

Our experiment stations from necessity have confined their efforts to the

simpler problems upon which results could be obtained readily. Along animal husbandry lines, they have attempted to find out what feeds or combination of feeds would pay best, but ignored the variations in the ability of different individuals to pay for their feed, except by trying to nullify this factor in feeding experiments through the use of greater numbers. As a result of such neglect, the art of selecting individuals has not made progress parallel with other lines.

To show that there is such a large unexplored element and to make the proposition more concrete, a few illustrations are here given. Consider the change in the distribution of laurels in the dairy cow world since the introduction of the Babcock test. Even in such selection of dairy cows upon conformation as may safely be done, the jury cannot agree upon the importance to be assigned such external features as for instance, milk veins and wells. Not many judges, or near judges of fat steers would care to risk their reputations upon the hazard of placing animals for carcass purposes if slaughter were to follow immediately. Rarely do we find a man who has the insight to penetrate beyond the wrapping of skin and tell us much of what the carcass package actually contains.

But much more important than the rating of animals for carcass purposes, is the rating of feeding and breeding animals and the problem is increased in difficulty, for here it is a question of functions of which accurate estimate is impossible. We may do fairly well at rating animals when in finished condition but nothing is more fundamental in live stock operations than the selection of feeding and breeding animals when in feeder or breeder condition.

Diamonds must usually be uncovered in the rough.

Take the matter of constitutional vigor. We are prone to seek indications of its presence largely in the chest, yet the dairy cow, a most hard worked animal, has her smallest girth here. The Nebraska Station measured some steers being put on feed to find out what external features might indicate gaining capacity. Repeatedly, they found a very direct and constant relation between the middle girth at 1000 pounds weight and the rate of gains, but practically no such relation could be established with the chest girth and none at all with the hind flank girth. Such evidence is significant more for the doubt it casts upon criterions of judgment long pasted in the hats of feeders than for any guide post to selection it establishes. We begin to realize how dark the inside of a cow really is and how little we know where emphasis should be put. Much of course, depends upon details of figure and internal makeup that tape line or meter never could register.

A great deal is made of correlation of parts and usually that is a safe thing to do, but correlation from the meat or milk makers point of view may not agree with nature. Our best specimens in fact may be monstrosities from the angle at which nature views them, although seemingly well adapted to thrive under the artificial conditions of domestication.

Deficiency in one respect may be compensated by extra development in another part. Take an instance from human anatomy. The long heel of the African adds to the mechanical advantage of the lever, and in consequence they have smaller calves than other peoples. Numerous such in-

stances could be cited from the make up of the horse and indeed, in so far as a horse's value is dependent upon mechanical strength and advantage, which is indicated externally, the horse judge is on the most solid footing of all.

But when it comes to functions compensating each other, we are quite in the dark again. The dairy cow of apparently small middle may compensate for the deficiency by ability to take food more frequently, or by ability to use more grain in her ration. The possibilities in such directions are numerous yet so little is known that these examples are hazarded cautiously.

The practice of judging live stock has not profited as it should have from anatomy and physiology. Few persons have both sorts of knowledge, so that judging has not been harmonized with and solidly fixed on anatomical and physiological foundations. Among other things some one should show us just why the beef steer requires 12 or 13 pounds of food to make a pound of gain, while the hog takes but 4 or 5 pounds. Even the sheep growing a valuable fleece of wool uses but 9 pounds. If this disadvantage due to the internal economy of the steer could be obviated,

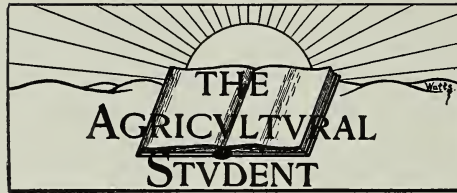
the beef shortage would be dispelled.

Judging has always been closely connected with the shows so that in large measure it takes the form of selecting the show animal, the handsome one, which, it may be urged, is well enough since undoubtedly producers enjoy working with the more handsome kind, but such ratings do not give ample recognition to the practical phases.

This is not written to discourage the efforts of any one to become a capable judge, nor yet to suggest a solution but to point out to student and stockman that there are outstanding need for deeper study and analysis. This unknown element is not altogether unknowable, and there is opportunity in this field for whomsoever will explore it and make plain its contour and environs.

If such further information were at hand it would vastly facilitate the teaching and the study of live stock judging, and instructors could find a safe answer to the student's query "which is more important?" so often asked and yet so seldom answered. We should not rest satisfied with the present store of wisdom, for after all, our best efforts are but merely scratching the surface.

"We are going to find out, if possible, what is the best type of American farm and farmer, and cultivate it. The ideal American farm—the one on the whole best fitted for raising both hogs and humanity, corn and citizens—may be of 100 acres, or 160, or 200. We don't know yet; we want first to find out; then we want to push for that kind of farms, worked by the best kind of farmers for that kind of farming."—Secretary Houston.



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A. J. Bishop, '15.

Associate Business Managers:

C. J. Windau, '14.

R. L. George, '16.

COLUMBUS, OHIO, APRIL, 1914.

Editorial

These two dates should be set down in the engagement book of every agricultural student and **APRIL 17** religiously kept. On **AND MAY 9.** these dates occur the two most important events of the year. The former is the date of the Annual Banquet, the latter is the date of the Horse Show. These should be the two most auspicious events of the year. Every man who neglects to attend either is missing a part of his college education just as much as though he cut classes or omitted some important subject in the curriculum.

Many people are afraid to face the truth; others fear to say just what they think, while others will bow to the wave **TO OUR YOUNG MEN.** of public opinion rather than take a positive stand for the right and for the truth. We hear much about our sturdy

ancestors who "hewed to the line," about the Puritan and Pilgrim fathers who would not surrender one iota of what they believed to be true. Oh, would that more of our public men, our teachers, our leaders and our college men had more of this old time firmness and strength of character!

Mr. L. H. Webster deals very forcefully with the strength of character needed—and so often found lacking—in our younger generation. Mr. Webster has traveled all over the United States and studied the people in all parts of the country. Are the charges that he makes true? Shame on the present generation if they are. The times require men of sterling character and firm determination. True, we do not need warriors to lead us in battle, but leaders in private life are in demand; men who will do and dare; men of strong wills, true ideals and lofty aims. Let our young men respond to the call of the higher ideals of life,

stand firm for the truth, for righteousness, for their country and for their God.

There is an old legend to the effect that "Everything goes by extremes."

At the present time
THE CITY MAN there is a great
IN rush towards the
AGRICULTURE. Agricultural Col-
 leges of our land.

Men of all ages and from all walks of life are taking the course in agriculture. Is there not an element of danger in this that may work harm rather than good to the cause of agriculture? Our farmers have always been and are yet the backbone of our nation. To teach and even believe that they are a bunch of ignoramuses is the height of folly. Some of our agricultural leaders are objecting to the practice of granting the same degree to all the men at the end of four years' work no matter what their previous training has been. Many of these men know absolutely nothing about actual farm conditions. They could not make living wages as hired men so they get a position as a teacher of agriculture in some school or college or they become an investigator in some experiment station, or perchance they go down to Washington and go out as experts and travel over the country advising old, hard headed, practical farmers what to do. One of these city farmers said that he wanted to get "one of those white shirt jobs down at Washington." A few such men graduating from the Agricultural College have a tendency to prejudice the general public against all the college graduates.

This question is receiving careful consideration from the Association of Agricultural Colleges and Experiment Stations. At the meeting in Washing-

ton, last November, the committee on Instruction in Agriculture made a report on this subject. They advocated that every student enrolling in the four-year agricultural course be given some sort of an examination to determine the extent of his knowledge of farm operations. Those who have had no actual farm practice shall be required to spend a reasonable length of time on some good general farm. They must receive a certificate from the farm operator to the effect that they are satisfactory farm laborers.

No man should be graduated in the four-year course who has not had a reasonable amount of actual farm experience. This experience must be obtained, not on a farm that is the whim of some rich man and where conditions are abnormal, but instead it should be secured on a good average farm where conditions are real and where all kinds of farming is being done. We will wager that there are men in the Agricultural College who cannot harness and hitch up a team of horses and do it properly. Is it right to such a student or to those students raised on the farm, and is it fair to the great cause of agriculture to graduate such men without actual farm experience?

How many questions does the student ask of the instructor in Animal Husbandry that he is

THE SCIENCE unable to answer.
OF JUDGING. There are many
 phrases used in giving

reasons for certain placings in the class room and the show ring that have little more weight than the breath used in uttering them. Often do we hear of judges in the show ring who are unable to give any substantial reasons for their placings. Mr. Gusler treats this phase of the judging problem in his

article. There is great need of much careful, scientific work being done along this line. Facts are needed to back the reasons of the present system of judging or else a new system should be installed in place of the present unsatisfactory one.

The world is becoming too practical and scientific to take anything on some man's opinion. Now, facts are demanded. Just a little work has been done along this line—much is yet left to do. Have the dairy people the best system of judging in their Advanced Registry work? Is the show ring standard to disappear? Shall the block be the final criterion of the fat animal? If so, are we to have a breed or type of monstrosities? Will beauty be sacrificed to the almighty dollar? Let there be more careful work done along the line of getting the judging work on a firm basis. Some say the animal husbandman of the future will be a scientist. Let that be as it may, there certainly is plenty of room for science in the animal husbandry work of today.

Early do we remember hearing the good minister quote the familiar phrase, "The cattle on a thousand hills." According to some of our fanatic writers of the day, not

only the cattle but all other classes of live stock are fast disappearing. Is it well or ill that many farmers are going out of the live stock business? Let us see. The "law of diminishing returns" or stated another way "the law of proportions" is of vital significance to the modern farmer. Modern agriculture, to be successful, must be properly related and correlated, one phase to the other. Can such a branch of agriculture as the live stock industry be relegated out of existence? Reason says no. There will be some changes made—in Ohio as elsewhere. Good stock will replace the scrubs; better stockmen must take the place of the inefficient; land not suited to farming will be turned to permanent pasture; the chemistry of feeds and the science and art of feeding will be studied as never before and the type of live stock will change to suit the newly developed conditions. If some types of breeds are relegated to the scrap heap of modern progress—well and good. The world still moves and the live stock men must adapt themselves to changing conditions. The race may be too swift for some but there will arise a new race of stockmen capable of adapting themselves to the changing conditions—and still will the good minister be able to truly say, "The cattle on a thousand hills."

It is the season now to go
About the country high and low,
Among the lilacs hand in hand;
And two by two in fairyland.

—Robert Louis Stevenson.

Bouquets

New York, Dec. 22, 1913.

J. W. Henceroth,

"The Agricultural Student," Columbus, O.:

Dear Sir—Let me take this occasion to express to you my genuine appreciation of the periodical which you and your staff are sending out monthly so auspiciously. The material which you present can not but attract attention. The periodical is gotten up in clean and attractive style and I want to wish for you and your staff the very best of success in your efforts to usher in a new era of our rural civilization.

Very sincerely yours,

(Signed.)

HENRY ISRAEL,
Research and Editorial Sec. of "Rural Manhood."

Des Moines, Ia., Oct. 21, 1913.

J. W. Henceroth,

Care Agricultural Student, Columbus, O.:

Dear Sir—A copy of the September issue of The Agricultural Student has just reached my desk. I wish to heartily congratulate you and all connected with the publication upon this excellent issue.

It is certainly evident that The Agricultural Student is keeping pace with the rapid growth made in the College of Agriculture.

With best wishes for your success, I am

Yours very truly,

(Signed)

A. H. SNYDER, '01,
Associate Editor, Successful Farming.

WITH THE BREEDER

NOTES OF INTEREST AMONG THE FLOCKS AND HERDS

Few students today are familiar with the early history and development of the animal husbandry instruction at Ohio State. This department was established in 1904 after Prof. Plumb came to the university in 1902 from Purdue University. The next year Prof. H. C. Price became dean of the college to succeed Thomas F. Hunt. At that time the department had only one office and two class rooms in Townshend Hall. The live stock consisted of a few common work horses, about 40 dairy cows mostly grades, and a few pigs.

An appropriation of \$3,000 in 1902 permitted the purchase of some beef steers, pure bred horses, Shorthorn and Jersey breeding animals. Since that time the legislature has made appropriations which have resulted in a material improvement of Ohio State live stock equipment. In 1907 an appropriation of \$80,000 brought to us the Judging Pavilion, Horse Barn, and Cattle Building. These were dedicated in February, 1908. A poultry course was started in 1911 and a poultry plant was erected the following year. Additions were necessary in the instructional force until today we have seven in the department and a superintendent of live stock.

Most of the animals in the university herd today are good specimens of the breeds and many of them have taken high places in live stock shows, especially at the International Live

Stock Exposition. The large number of students now taking work in this department find excellent facilities in judging animal form and management in the university stock and in the herds and flocks near Columbus. It is through these means that the student becomes familiar with the most noted show and producing animals, and to-day the Animal Husbandry Department stands as one of the largest in the college.

If American wools were sent to market graded and put up as attractively as are Australian wools, it is estimated that an increase in price of as much as three cents a pound might be received by the grower. Wool growers and dealers admit that the American system is very bad, and at the annual meeting of the National Wool Growers' Association in Salt Lake City, considerable interest was shown in the proposal to adopt the Australian method of putting up wool. Three cents a pound upon wools selling at 15 to 30 cents a pound is a high per cent of loss which can be and doubtlessly will be prevented by wool growers in the future.

The Bureau of Animal Industry of the U. S. Department of Agriculture has prepared a collection of American wools for use in educational work in this direction. This exhibit includes samples of various grades of wool, showing how grade and value may be

determined by factors under the control of the sheep raiser.

The Supt. of the A. R. of the Holstein-Friesian Association reports three new champions within the last month. Lady Paul Livardy 3rd has broken the record of fat production in the junior two year old class of the yearling division by producing 737.36 lbs. fat at 2 years and 2 months of age. She is owned by J. W. Dimick of Rifton, N. Y.

Briar Pietje Abbekerk now heads the junior three year old class of the yearly division with a record of 764.35 lbs. fat from 21,628.3 lbs milk. She is owned by A. A. Knapp of Preble, N. Y.

The third is Lady Tobe De Kol in the senior three year old class. She produced 29.3 lbs. fat from 632 lbs. milk in 7 days and 113 lbs. fat from 2,486.5 lbs milk in 30 days. She is owned by J. Arfmann, Middletown, N. Y. In both these divisions she displaces Glen Canary De Kol who became champion only in February.

The distinction of having the highest record of butter of any cow owned by a college or experiment station falls to Buckeye De Kol Pauline II of the Virginia Polytechnic Institute. She finished in February a record of 1159 lbs. butter from 20,784.3 lbs milk. She was cared for entirely by the students and received only ordinary care. The dairy editor of the Holstein Association says

the southern states will be stocked with "dairy cattle that will equal in production those of the northern belt."

Futurity contests for Jersey cattle have been started by California and New York breeders. The test at the Panama Exposition has many attractive features and will be watched with interest mainly to see the practicability of the plan. California breeders deserve the credit for starting the futurity contests.

The New York Jersey Cattle Club has decided to hold a futurity test for heifers under 30 months of age. Heifers born after July 1, 1913, will be eligible for the 1917 futurity.

Special honor and credit is attributed to Ohio dairymen in the report of the Holstein-Friesian Advanced Registry Association, showing the records for February 10 to 12. Heading the list of aged cows is Lothian Maggie De Kol, who also made an exceptional record eight months after calving. The second is Maple Crest Flora Hartog and is the fourth of a quartet in one Ohio stable where the production of the last was 962.8 lbs. butter fat. At the head of the senior four year olds stands the third Ohio cow, Lindenwood Hope. The Dairy Editor reports "Ohio is now able to show a larger number of the very great records by full aged cows than is any other state."

Then I cast loose my buff coat, each halter let fall,
Shook off both my jack-boots, let go belt and all,
Stood up in the stirrup, leaned, patted his ear,
Called my Roland his pet name, my horse without peer;
Clapped my hands, laughed and sang, any noise bad or
good,

'Til at length into Aix Roland galloped and stood.

—Robert Browning.

CURRENT AGRICULTURAL LITERATURE

COMMENTS AND CRITICISMS ON
CONTEMPORARY CONTRIBUTIONS

Soils and Crops by **Hunt and Burkett**. In the preparation of this book, the authors have kept in mind the requirements and ability of high school pupils. The book is divided into forty-eight chapters; and each chapter into fifteen paragraphs which may serve for individual recitations. In addition to the subject matter of the text, many practicums have been included to supplement the recitations. The text covers the elementary principles of soils, cultural practices, and plants, together with short treatises on insects, diseases and weeds. 541 pages, illustrated. Cloth, net, \$1.50. Orange, Judd Co., New York.

Agricultural Engineering by **J. B. Davidson, B. S., M. E.** This book, a general treatise on agricultural engineering, has been prepared for high school pupils, or for college students when only a general course in this work is offered. The main divisions of the book are as follows: agricultural surveying, drainage, irrigation, roads, farm machinery, farm motors, farm structures, farm sanitation and rope work. Necessarily, the book cannot be exhaustive in any particular, but rather treats of the fundamental principles of this subject. 554 pages, illustrated. Cloth, net, \$1.50. Webb Publishing Co., St. Paul, Minn.

Ventilation for Dwellings, Rural Schools and Stables by **Prof. F. H.**

King. This is a brief treatise on the principles underlying air requirements and ventilation. The first main division treats of the air requirements of animal tissues; the second part of the principles of ventilation; and the third part of the practices of ventilation. In the last part ways of securing the desired ventilation are suggested and also the optimum temperatures for different buildings. The book was written in particular for the enlightenment of those in whose care or under whose supervision children are to be kept. It may be obtained from Mrs. F. H. King, Madison, Wis. Price 50 cents.

Management and Breeding of Horses by **M. W. Harper**. This book is an attempt at arranging information useful to the farmer, breeders and student. It is the outgrowth of experience of a practical horse breeder and instructor. The book includes a discussion of the economic usefulness, judging and allied subjects, early history, study of breeds, breeding, feeding, care and management of both horses and mules. Special emphasis is placed on the management of the brood mare as well as that of the colt. The book includes a discussion of the methods of training, biting, harnessing and the like. 466 pages, illustrated. Cloth, net, \$2.00. Orange Judd Co., New York.

In The Work of the Rural Schools the authors, **J. D. Eggleston and Robt.**

W. Bruere are keenly alert to the fact that one of the gravest problems which our civilization has to solve is that which concerns rural life. Throughout the entire work the slogan has been that of "hitching up education with life." Plainly and authoratively it tells what has been done and what still remains to be done in this direction. Cloth, net, \$1.00. Harper and Bros., New York.

Mann's Agricultural Bookkeeping Instructor by **J. D. Mann**, is a book which deals with this subject in a manner that can be understood by any present day farmer. It is designed for self instruction, containing 116 real farm transactions. The book is well bound and has 52 pages with the blank book for entries. Cloth, \$1.75. J. D. Mann, Galena, Ohio.

A Modern Arcadia of the Southwest is the title of an article by **O. C. Payne** in **Farm and Ranch**, of March 14. It is the description of what the author terms an ideal small farm. The home and the barns are equipped with all

modern conveniences. The owner, although not able to farm the land himself, knew the importance of securing an educated, studious manager. Just such a man was discovered in Mr. R. R. Walker, an Ohio State graduate of '12.

Economic Value and Future of the Thoroughbred Horse was the subject of an address delivered before the Kentucky Horse Breeders' Association. This timely subject is well handled by its author, **J. W. Camden**. It is published in circular No. 17 of Ky. Agr. Ex. Station, Lexington, Ky.

A new bulletin which should be of interest to the farmers has just been published by the U. S. Department of Agriculture, entitled "A System of Farm Cost Accounting." (Farmers' Bulletin No. 572). No previous knowledge of bookkeeping is necessary to understand the system outlined, and if the farmer follows the suggestions he will find them of value in estimating the profits or losses on his business every year. The bulletin may be had free on application to the department.

THE BOYS THAT RUN THE FURROW.

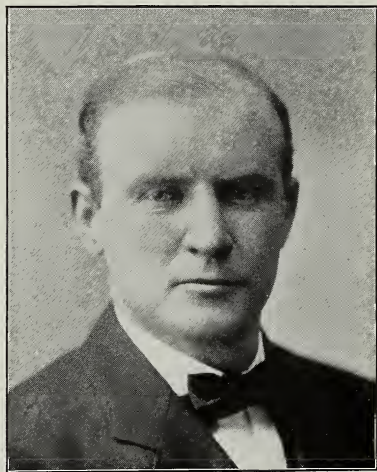
You can write it down as gospel,
With the flags of peace unfurled;
The boys that run the furrow
Are the boys that rule the world!

It is written on the hilltops,
In the fields where blossoms blend;
Prosperity is ending
Where the furrow has an end!

The waving banners of the fields
O'er the broad land unfurled—
The boys that run the furrow
Are the boys that rule the world!

—Atlanta Constitution.

ALUMNI WHAT THE BUSY GRADS ARE DOING



Renick W. Dunlap entered the Ohio State University in 1891 and was graduated in 1895. He was captain and manager of the football team in '95, and, in addition, played in every game of the season for four years.

After graduation he returned to his home farm at Kingston, Ohio, where he has been farming ever since. He was the first in that community to use commercial fertilizers intelligently, and, during the first year that he was out of college, he grew with the aid of fertilizer as much wheat on fifty acres as his father did on one hundred and fifty acres with no fertilizer. He was also the first to build a silo, to grow alfalfa and to use ensilage in the growing and feeding of beef cattle. Live stock farming is his hobby. At the present time he has about 300 head of pure-bred Duroc Jersey swine and is feeding a large number of cattle every year. Percheron horses also form a valuable

asset to the live stock on his farm.

Besides being a practical farmer, Mr. Dunlap has served the interests of the people of Ohio to a great degree. He was always active in institute work and was on the state lecture force for several years. In 1903 he was elected to the Senate and made chairman of the committee of agriculture. He was author of the commercial food stuffs bill in 1904. In 1906 he was nominated and elected Dairy and Food Commissioner. The faithful performance of his duties led to his re-election in 1908. After serving the second term he returned to his farm where he is actively engaged in live stock farming.

Donald R. Acklin entered the Ohio State University in 1904, and was graduated with the Degree of Bachelor of Science in Agriculture in 1908. Immediately after his graduation he returned to his home at Perrysburg where he has been engaged in the production of pure-bred stock exclusively. He has fitted and shown at many shows including the International Stock Show, Hackneys and Shires and won many blue ribbons. He has been the judge of many horse shows not only in Ohio but in other states as well. At present he is developing a good herd of Yorkshire swine, besides maintaining a small flock of Shropshire sheep and a few Jersey cattle. He is secretary of the Wood County Live Stock Breeders' Association and is doing much toward the betterment of live stock conditions in that county.

John C. McNutt was graduated in

1907 and spent the first year after graduation at the Hartman Stock Farm, Columbus, Ohio. In 1908 he went to New Hampshire College of Agriculture as Assistant in Animal Husbandry, was advanced to Assistant Professor at the end of the first year and to Associate Professor at the end of the second year. During the summer of that year he resigned to become Professor of Animal Husbandry and Dairying at North Carolina College of Agriculture which position he is holding at the present time. Concerning the work at that place Mr. McNutt says: "I found very little to work with when I came to North Carolina but fortunately the people were interested in Animal Husbandry so we have been able to develop one of the strongest and best equipped departments in the South."

S. M. Salisbury, '13, a member of the 1912 judging team is an assistant to Mr. McNutt at the North Carolina College of Agriculture. He is reported as doing splendid work in this department.

H. E. Allen was graduated from the Ohio State University in 1909. Immediately after graduation he was chosen as Live Stock Field Man for The American Agriculturist but resigned this position in September, 1909, to become Associate Professor of Animal Husbandry at Virginia Polytechnic Institute, Blacksburg, Va. In 1910 he became Instructor in Animal Husbandry at Purdue University, Lafayette, Ind., and, in 1912 was advanced to Assistant Professor which position he now occupies.

L. L. Heller, '12, is in the Sheep and Goat Investigation work with the Bureau of Animal Industry. **E. L. Shaw**, '02, is in the same department and both

have published a number of bulletins on sheep management. They are now preparing a bulletin on the breeds of sheep. Mr. Heller is also working at Lowell, Mass., gathering material for wool classification. He is attending the Textile School of that place.

A. R. Moist, '08, is manager of Sheffield Farm at Glendale, Ohio. Aside from the general routine of stock raising he has worked out a special crop rotation of corn and alfalfa. He says the fertility of the farm has increased 10% within the last three years by following this method.

Perry Van Ewing, '11, formerly secretary to President Waters of Kansas State College, is now Chief Animal Husbandman at the Georgia Experiment Station.

O. H. Pollock, '12, lives on a farm near Delaware, Ohio. He is interested in the breeding of Percheron horses and Shropshire sheep.

George R. Rinehart, '12, manager of a large plantation at Keswick, Va., announces the arrival of George R. Jr. Mrs. Rinehart (nee Elsie Leue) was the only girl that has ever taken the four-year course in Agriculture.

C. R. George, '12, is an instructor in Animal Husbandry in the University of California. He spends about three days of a week lecturing at Berkley and the rest of the time at the Experiment Farm at Davis in laboratory work.

J. E. Clawson, '08, is engaged in the breeding of fancy Shire horses near Okeana, Ohio.

Gilbert Gusler, '12, is an instructor in the Animal Husbandry Department at Ohio State.

E. O. Williams, '13, is engaged in live stock farming at Mt. Victory, Ohio.

Secondary Agriculture

Devoted to the Interests of Agricultural Education in High and Common Schools

IT is remarkable how much cheap and simple materials, in connection with just a little planning and labor, will do in the way of making home and school grounds more liveable and attractive. As most people only have the opportunity of seeing the outside of the home, the nature and character of the people there will be judged far more by what is seen outside of the house than what may be within. The problem is also worth considering from the standpoint of keeping the boy and girl interested in the home. From the mere standpoint of dollars and cents the home surroundings become important. Nothing will add more to the value of the property than neat well planned and well cared for grounds. In order to aid those who are desirous of doing some planting about the home and school this spring, the department of Agricultural Extension of the Ohio State University, will suggest plans for this work. If a diagram showing the size of the premises, location of the house, other buildings, trees and road accompanies the request it will help a great deal in suggesting plans for planting. Those persons who are desirous of obtaining these suggestions should write to A. B. Graham, Ohio State University, Columbus, Ohio.

“Of course it goes without saying that the effectiveness of agriculture as a means of training depends on the way in which it is conducted in any

particular case. We may expect to find loose, inadequate and ineffective teaching of agriculture as of other subjects, and even more so because the subject is new and the educational methods are not well worked out. It is possible to make a course in agriculture in the high school and the college just as definite, organic and sound as a course in chemistry, physics, Latin, calculus or civics. Until this is accomplished we cannot expect the best results from the work, but this realization is coming more rapidly than many of us are aware.”—L. H. Bailey.

“That men and women may remember and little children may learn the significance of the things of nature in this world of God’s, I hereby designate Friday, April 10, as Arbor Day.”

Let us gather at our places of study and elsewhere and devote a few hours to the consideration of the trees and plants and flowers to the birds of the air and the beasts of the field and to all other created things.

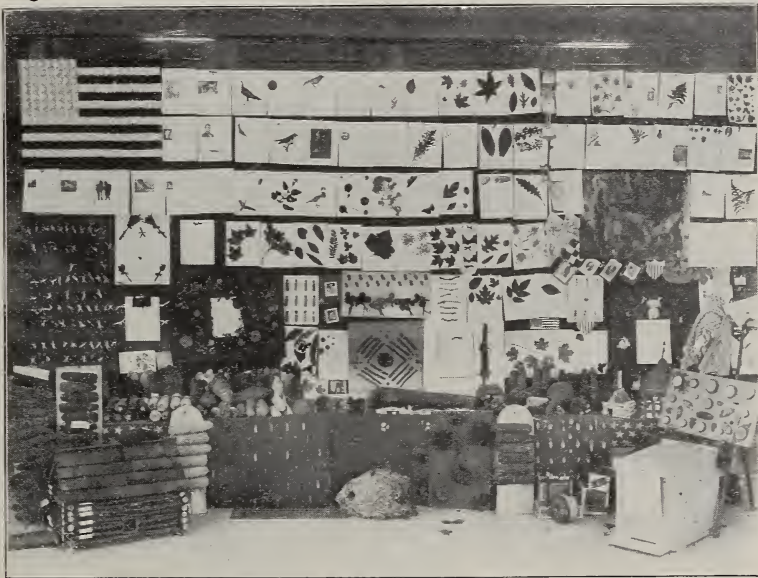
Let us plant each shrub or tree to the end that life may be promoted and humanity all the better served. With song and speech let us proclaim the love and beauty of the soil and outdoor world and resolve each in his or her own way to embrace the usefulness and beauty of his or her environment.” This is in part the proclamation of Governor Cox in setting aside April 24 as Arbor Day.

SCHOOL AGRICULTURE EXHIBIT.

An agriculture exhibit may consist of the regular class work in nature study and agriculture displayed for public inspection. Its object is to create more interest in the pupils for the things in which they will be directly concerned after leaving school. The best time to hold such an exhibit is in the spring of the year. In this way the work of the entire school year may be shown. It is a good plan to begin early to arrange

the seeds to small white cards and label them. Another way is to place them in small bottles which cost about one cent each. In either case they should be fastened to a large card board about three feet square in order that it may be hung up.

Other grades may gather cocoons of insects and prepare a glass covered box in which to watch them develop. The girls may take special part in illustrating some of the common prin-



INTELLIGENT INTEREST IN AGRICULTURE IS NECESSARY TO SUCCESSFUL TEACHING.

the school work in such a way that it will appear best. The work must be well arranged and be put up in good form in order to leave the right impression on the visitors.

The work of all classes above the second grade should be included. While it may seem a little difficult to provide work for the lower grades for such an occasion, yet it can be done successfully. They can obtain samples of the common garden seeds and be able to identify and group them. An inexpensive way of arranging these is to glue

siples of plant propagation by their work with flowers. Drawing up complete plans for a home garden is a good exercise and quite practical. Many girls like to show their ability in preparing their final products of all agricultural work; namely, cooking. A baking contest is always interesting. In most cases this work is done at home.

In the upper grades geography may even be included in the form of maps showing the agricultural products of the various states. This map should

be on stiff white paper at least eighteen by twenty-four inches in size. The states are drawn in ink but are not named. In each state is placed by means of glue, a representative of its products as coal, lead, tobacco, copper and the various grains. Lumber is represented by small pieces of wood cut in the shape of logs, fruits by the seed or a piece of the peel, and animals by small pictures cut from papers. Four pieces of wood fastened to the back in the form of a frame will make it easy to hang up. A relief map showing the lay of the land and the drainage may be made with a paste of salt, flour and water on a board. The end of a store box, painted blue to represent the sea, does very well. On this draw with a pencil the outline of the map and spread the paste to the edge of the lines. Then, by means of a knife work in the highland and the lowland with rivers and mountains and set aside to harden. In making the paste mix two parts by volume of salt with one of flour and then add one of water.

Experiments with soil can be shown illustrating capillarity, drainage and aeration with chalk boxes. The seed corn tester will show the skill of the boys in the use of tools and will prove a great lesson in the testing of seed if it is shown in operation. A class separating and naming various kinds of clover seeds or others brings out a point about which most people desire to know. Trees are represented by labeling pressed leaves or by pieces of wood or bark.

Prizes are sometimes given by people of the community to the pupil having the best thing or group of things in each grade or by some other arrangements suited to the circumstances. These prizes consist of money, books,

subscriptions to papers and articles given by merchants.

The results of such an exhibit are that the people of the community get better acquainted with the work carried on in the school. The pupils are stimulated to more efficient work. The whole school sentiment is improved and the school work is carried on more systematically.

C. E. Wylie, '15.

Animal Husbandry is a subject that should interest every boy in school—whether in high school or in the rural school. It should be of the greatest importance in the rural school for here the pupils have the possibility of practical observation every day. In the consideration of this subject we can approach it from two different standpoints, the technical and the cultural sense. Many are apt to regard animal husbandry as purely technical and lose sight of the cultural side. We should not forget that there is no better way to develop reasoning power and to stimulate keen observation than by teaching agriculture and its sidelines such as animal husbandry. If our high schools would regard the teaching of agriculture from the cultural side it would undoubtedly receive more attention concerning its position in their curriculum. Time and space do not permit us to dwell at length on the subject, therefore, we shall only suggest those points upon which the teacher can enlarge.

In the study of animal husbandry a classification should be adopted. In this manner we can divide cattle into two classes or types—the dairy type and the beef type. Each of these types has certain characteristics. Thus, the dairy cow presents a wedge shaped

appearance from behind, from the side and from above. The udder should be wide and full, extending well forward and high up between the thighs. The different breeds under this class are: the Jersey, Guernsey, Ayrshire, Holstein-Friesian, Dutch Belted, and Brown Swiss.

The beef type should not be angular like the dairy type but, instead, be well rounded and compact. The back is broad. The general shape is blocky. The beef breeds are: the Shorthorns, Herefords, Polled Durhams, Aberdeen-Angus and Galloways.

Classifications of similar nature can be used for all live stock. Horses may be classed as draft horses, roadster breeds, coach horses, and ponies. Sheep can be classified as fine-wool breeds, medium-wool breeds and long-wool breeds. Hogs may be divided into the lard and bacon types.

Such classification may be used to good advantage for it enables the pupil to work on a definite basis. The use of text books on this subject will be especially valuable for reference and particular discussions as to the home and origin of live stock.

BIRD STUDY.

The teacher who takes up the study of birds should have a definite plan to follow. Furthermore the teacher must be enthusiastic on the subject and not merely present the study for pastime. Talking and reading about the different birds will not suffice. The pupils should be given the facts to develop so that they can observe and make the desired data. The following is a form of analysis given by the Bird Manual of West Virginia Extension College.

(1) Recognition, (2) arrival, (3) home, (4) eggs, (5) young bird, (a)

how fed, (b) clothed, (c) flight, (d) education, (7) food, (8) migration, (a) when? (b) where? (c) why? (d) do all go? (e) how they travel, (g) rate, (h) winter home, (9) affection, (10) intelligence, (11) body, (a) temperature, (b) covering, (c) how adapted to flight, (d) head, (e) feet, (12) birds our friends, (13) how to attract birds.

The pupil should be taught to make friends with the birds and to regard them with no prejudiced motives. This may be accomplished probably by teaching the importance of birds to the farmer. A quail is estimated to be worth \$19.88 for the cut worms which he destroys in a year. The Meadowlark obtains 90% of his food from insects. Is he beneficial? It has been found that 85 different weed seeds make up one bird's range of food. Think of 1,000 rag-weed seeds in one bird's crop. A bird at Pine Brook, N. J., was found to have 5,000 seeds of fox-tail in its crop, and, another at Kincade, Ga., had eaten about 10,000 pig-weed seeds. Such facts will appeal to the reasoning power of the pupil and will stay with them.

Birds should be encouraged to make homes near the school building, and boxes can easily be provided for the purpose. Many of the song birds find it difficult to secure a safe place to carry on their activities; so any artificial provision will help them greatly. Blue-birds and wrens respond most quickly and will even rest in a box that is placed within a few feet of a window. Sparrows are often a serious pest to song birds since they take possession of the boxes and drive the present occupants away. This can be overcome by hanging the box on a wire or vine which allows the box to move freely. Sparrows will rest only in stationary places.



THE CHAMPION AGRICULTURAL BASKET BALL TEAM.

TOP ROW (left to right)—Manager and Coach Little, Forward Sturgeon, Center Roberts, Intra-mural Chairman Pontius.
LOWER ROW—Forward Shiffler, Forward Stout, Guard Perry (Captain), Guard Curtis, Guard Hale.



Athletics at Ohio State



OHIO STATE has just reason to be proud of her athletic record made so far during the first year in the Western Conference. In the three conference football games played, Indiana won the first 7-6 a game in which luck played an important part. The strong Wisconsin eleven was held to a 12-0 score and, in the last game of the season, Ohio came back strong by defeating Northwestern 58-0.

Then on November 22nd, Ohio's cross country team finished third in the Western Conference run which was held on the Ohio course. Wisconsin finished first and Illinois second. Thirteen teams made up of the best runners in the middle west competed in this event.

In basketball the Conference babies finished second with Wisconsin first, winning 5 out of the 6 games played. Chicago was the only Conference team to defeat the Ohio basket tossers. State was not so fortunate in the Ohio Conference, however, suffering two defeats at Oberlin's hands and one in a loosely played game with Ohio Wesleyan. The strong Dennison five, Ohio Conference champions and undefeated for three years, met their Waterloo in the Ohio gym and were outplayed in a hard fought game, to the tune of 27-22. They afterwards defeated Oberlin on their own floor making them Ohio Champions.

Due to the encouragement of the Athletic department and especially Jack Wilce, much interest has been shown in the intramural sports this year. Some very good basketball

games were played by the different college teams. The strong "Ag." quintet came through their schedule without a defeat, winning the pennant in the Sextet league and then downing the Chemicals, Electricals and "Horts." in three successive games, took the championship of the University.

Saturday, March 28, the big Intermural meet was staged in which the "Ags." were also victors, making 29 points, 12 points over their nearest competitors, the Civil Engineers. They were awarded two bronze shields one for basketball and one for the track meet. These will be hung in an appropriate place in Townshend Hall and the names inscribed on the bronze plaques. The members of the basketball team will be awarded jerseys.

The Scarlet and Gray runners showed rather poor form at the indoor track meet held at the Northwestern gym on March 21 and only secured $4\frac{3}{4}$ points, finishing in the sixth place. Illinois won the meet with Wisconsin second and Chicago third. Much better results are expected at some of the future meets to be held this spring.

Outdoor baseball practice has begun in earnest and on afternoons when the weather is fit, Coach St. John can be seen out on the diamond getting the team ready for the first college game which will be with Indiana, April 13. A long series of games has been scheduled, 19 in all, 6 of them being with Western Conference teams. Prospects are bright for a good nine this year. Several Ag men are expected to be in the final lineup.



April News Notes

WITH THE FACULTY.

President Thompson has completed his three weeks' vacation and has again assumed his duties. During his vacation he visited various cities of Virginia and also went to Washington, D. C.

H. F. Harrington, director of the course on journalism, will leave the university at the close of the school year to become dean of Western Reserve School of Journalism at Cleveland. This school is endowed by Dan R. Hanna, owner of the Cleveland Leader and News, and will be open only to graduate students.

Dean W. W. Boyd of the college of education will leave Ohio State to become president of the Western College for Women at Oxford.

Prof. H. C. Ramsower was unable to meet his classes from March 9 to 23, because of sickness. Prof. McCall had his classes.

Prof. Alfred Vivian recently addressed the Kenilworth club at Chicago on the subject, "With Kim Through India." The address was taken from Prof. Vivian's trip abroad last year. He also gave an illustrated lecture at the university grange March 25 on "The Philippines."

Prof. C. S. Plumb in a recent letter to "The Student" told of his trips

through southern Europe. He was at Canner, Italy, at the time of writing this letter, the first week of March.

Prof. Kays addressed a meeting of farmers at Perrysburg on Draft Horses. Professors Hislop, Gusler, Erf and Kays have been giving a series of lectures at a small school just north of the university farm.

Prof. A. B. Graham of the Extension Department has been appointed by the Agricultural Commission on a committee to arrange for state exhibits at county fairs. On the committee with him are N. E. Shaw, state inspector of orchards and nurseries; D. W. Galehouse of the Ohio Experiment Station, and H. S. Mesloh of the dairy and food division.

Prof. Erf is giving four special lectures on dairy management to students who are interested in this subject. A lecture is given on Thursday evening of each week.

W. H. Palmer of the extension department has been engaged to instruct the pupils in the various counties in animal husbandry. This is in connection with the work of the county judging contests which will be held this fall.

M. A. Bachtell of the extension department is starting variety tests of corn for some of the farmers of north-

ern Ohio. These tests deal with the nature of the soil and crop adaptation in that section. Fertilizer tests of the same plots will probably follow.

R. B. Cruikshank of the department of Horticulture is giving pruning and spraying demonstrations in the southern part of the state.

In a recent talk before the employees of the New Wooster Preserving Co., Prof. Montgomery outlined the commercial importance and the need of the canning business.

Prof. Davis of the horticultural department addressed a meeting at Delaware for the promotion of city beautification. He spoke on landscape gardening.

Dean Price read a paper on the proposed rural credit legislation before the meeting of the Western Economic Association at Chicago, April 14-15.

OUR STUDENT ASSISTANTS.

C. B. Harpster has charge of the grading of papers in Rural Economics.

H. C. Bumgardner is an assistant in the freshman classes in Animal Husbandry.

B. E. Pontius assists in the laboratory work in Farm Machinery.

J. P. Hershberger and D. W. Griffin are assistants in the Soils laboratory. Griffin also aids in Agricultural Engineering.

Those in the dairying department are E. A. Baumiller, A. L. Shebanek, L. H. Burgwald, F. L. Bowser and G. D. Norton. Their work consists partly in the testing of composite samples sent in by those conducting tests for the Advanced Registry.

C. L. Long, '13, has charge of some of the classes in Horticulture.

Lectures in bread making and home decoration have been given in public schools by a number of the students of

Home Economics. Among these are: Laura Anderson, Mary Betz, Treva Kauffman, Maud Okey and Helen Scott. These lectures are under the direction of the extension department and will continue until April 15.

The students in the Zoology and Entomology lab are: W. A. Price, V. R. Haber, Wm. Bauchmiller and G. B. Sawyer.

B. A. Williams is planning to direct some of the boys' judging contests at the county fairs this fall and to give lessons in stock judging in these counties this spring. C. L. Burkholder will also be sent out by the extension department to give demonstrations in spraying and pruning fruit trees.

The annual Townshend-Athenean debate will be held in the chapel sometime this month. Townshend will debate the negative of the subject: "Resolved, That all coast-wise vessels should be permitted to pass through the Panama Canal exempt from toll." Those representing Townshend are W. I. McCann, D. P. Evans and L. D. Campbell. This year a precedent is to be established in rewarding the debaters and other members who bring credit to the society. The privilege of wearing the honorary pin will be given to such members. The gold pin is to be in the form of a wreath with a large "T" in the center.

New improvements have come to Townshend Hall in the form of new lights and painting of all the walls. All the rooms and halls on both floors and the basement have been covered in white with olive green at the base of the walls. Five gilded chains hang from the ceiling in Townshend Literary room and at the end of each is a large frosted shade with a Mazda light.

Jeffersonian Literary Society has made its initial bow into the university for the purpose of arousing greater literary spirit. The promoters of the new society think there is room and need for the organization. It is to be co-educational.

T. N. Carver, of the U. S. Department of Agriculture, will be one of the principal speakers at the annual Ag. banquet to be held at the Ohio Union, April 17th. The entire program has not been completed as yet, but there will also be other prominent speakers. T. G. Phillips has charge of the affair and assures a good time to all.

Arbor Day material has been prepared by the Extension Department which will be sent to all newspapers of Ohio and other states. The sheet is the same size as the county newspapers and will be folded in with them. Professors Lazenby, Graham and Davis are the principal contributors to the sheet.

An appropriation of \$1,500 has been made by the Agricultural Commission to meet the expense of a mid-winter fair which will combine the Ohio Dairy Show, Ohio Apple Show and Ohio Corn Show. The fair will be held at the State Fair grounds.

This year the Agricultural Commission is to have exhibits given by the agricultural college, the experiment station, the dairy and food commission and the nursery and orchard inspection departments at the county fairs. Each of these departments is to arrange two or more sets of exhibits making a total of nine or ten but no two exhibits are to appear at the same fair.

A scholarship for the three-year

course in agriculture to each county in the state has been considered by the agricultural commission. This scholarship is to be awarded to the winner in the agricultural contests carried on in the county. There is no specified kind of contest but it may be a corn, wheat, or apple growing contest.

Arrangements have been completed with the Akron, German-Wallace and Antioch Colleges and the Capital University, in co-operation with the College of Agriculture, for the giving of an arts-agricultural course. The first three years are to be spent at the smaller college in the study of arts subjects and the last two at the College of Agriculture. The B. A. degree will be confirmed by the home institution at the close of the fourth year and the B. Sci. degree from the Ohio State University at the close of the fifth year.

Country Church Week will be observed at the university during the week of Aug. 10 to 14. It will be a week devoted to the interests of the rural church and its relation to the country community. Some of the best authorities from other states will speak.

That the colleges of agriculture are not tending to educate the boys away from the farm is shown by a census recently taken at the university. Of the men who have gone out from the Agricultural College in the last six years, 38 per cent are actually on the farm, while 71 per cent of the remainder expect to return there. The census also shows many profitable inducements in other lines of service. Many of these graduates receive salaries of \$1,200 to \$1,500 a year from the start.

Advancement for farm boys of the

state is being promoted by county fair boards in arranging to hold boy's livestock judging contests at their exhibitions next fall. Liberal prizes will be offered and, furthermore, the boys will be trained in stock judging by instructors from the College of Agriculture, who will also direct the contests in the fall.

"Travels in the Philippines" was the subject of the address of Prof. Vivian before the University Grange, March 25. This meeting was an open one and was the most successful of the year. The election of officers for next year resulted in the following: Master, Prof. L. M. Montgomery; Secretary, A. F. Head, '15; Lecturer, V. C. Smith; Chaplain, Prof. Cunningham; Treasurer, R. B. Stoltz.

Sixteen men took the civil service examination for advanced registry testing in the state on March 25 and all passed successfully. During the past year 50 to 60 men have been engaged in this work.

Placing all the agricultural education under the direction of the Agricultural college rather than under that of the agricultural commission was one of the plans advocated at the first annual meeting of Ohio State Alumni at the Ohio Union on March 28. Many other plans for a greater Ohio State were also discussed at the gathering. It was decided to hold a similar conference at the university next year.

The Ohio State Fair Grounds, conceded to be the model fair grounds of the country, will probably be taken as

the pattern for the proposed million dollar fair grounds at Harrisburg, Pa. W. J. Stewart, who is in charge of the proposed fair grounds, visited Ohio and was so well pleased with our plan that he will recommend that it be followed in Pennsylvania.

Fifteen hundred acres have been purchased at a cost of about \$170 an acre for the new penitentiary site near London, in Madison County. Buildings to cost three million dollars will be built upon the ground, and will be put up mostly by convict labor. P. C. Herron, of the Ohio Experiment Station, is to have charge of the farm.

Scholarships to the Agricultural College have been advocated for the winners in the corn contests of the state. Tuscarawas County Agricultural Society has taken up the plan and it will be followed next year. It is thought that such a prize will have a more lasting effect than a trip to the national capitol.

Pruning and spraying demonstrations under the auspices of the Ohio Bureau of Nursery and Orchard Inspection were held from March 16 to 21, inclusive, in thirteen counties of the state. This policy was advocated after the passage of the law compelling all owners of orchards to spray their trees.

During the summer of this year a large brood of the Cicada or "seventeen-year locust" will appear in all the eastern counties of Ohio with the exception of those bordering on the Pennsylvania line. Much damage is always done by these insects, especially to young fruit trees.

Our yards, our school house yards, and the resting place of our dead, should not be neglected, but should be adorned with Nature's own beauties—the trees.—Emma Bates.

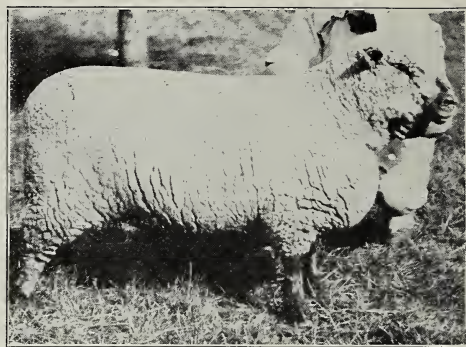
HORTICULTURE NOTES.

The demand for men skilled in pruning and spraying practices in this locality has lately exceeded the supply. During the recent spring vacation over forty students of horticulture were employed in orchard work throughout this vicinity. Many other students made the most of the spring recess by overhauling the orchards at home.

Work in the university gardens and orchards is progressing rapidly. The continued cold weather during March has put the department behind in their pruning and spraying operations, but students and workmen are now making the most of the fine April weather.

To study the commercial side of Ohio vegetable gardening, the annual Garden Inspection Trip has been arranged by Prof. Montgomery for the 1st of May. Most of the larger gardening concerns of Cleveland, Toledo and Ash-tabula will be visited by the students this year. Many men have already signed up for the trip.

The old cedar wind-break, which served such a term of usefulness to the west of the university gardens, is a thing of the past. Because the trees were growing too high to be longer useful and rapidly dying out, it was thought best to remove the entire row.



A CHAMPION SHROPSHIRE EWE.

—Courtesy R. & W. Postle.

ANIMAL HUSBANDRY NOTES.

Prof. R. D. Bohannon addressed the March meeting of the Saddle and Sirloin Club and spoke on "Saddle Horses." He pictured some of the early noted saddle horses and the development of the breed, but dealt mainly on the uncertainty of the breeding of this class of horses. "It is about five thousand times as hard to breed a saddle horse as a trotting horse because of the distinctive gaits and the desired conformation," said Prof. Bohannon. Dean White, of the Veterinary College, also spoke.

A letter from Prof. Plumb, written from Italy, was read to the club, describing some of his travels and observations in European countries.

Seven new men were received into the club at this meeting. Further plans for the horse show were presented for discussion. This is the greatest annual feature of the club's work and has been the means of making the influence of the club felt on the campus and in the city as well.

Present plans outlined for the third annual horse show on the campus, May 9th, point to a greater and more at-

tractive show than has ever been held before. As Prof. Bohannon said, "This is the greatest show in this part of the country," and those who have seen the former shows will agree with this statement. The co-operation of the owners of saddle and trotting horses down-town is assured. They have expressed an appreciation of the show in former years by their entries and their attendance. Committees are now at work in getting everything ready for this event.

Watch fobs for the members of the Saddle and Sirloin Club who were on the judging teams this year will be completed by the Easter vacation. These fobs are of gold and have upon them four animal heads with the Ohio State seal in a large "O."

According to a plan of Prof. Jacoby, water fowls may be placed on Mirror Lake during the summer. The poultry department at present has many varieties of ducks and geese and it is thought that their presence on the lake

will add beauty to the campus and interest in the department. The plan is being considered by the university authorities.

Some recent additions to the university swine herd have been made. A registered Berkshire sow, sired by Premier Masterpiece III., was purchased from Sheffield Farm at Glendale, Ohio. A much appreciated gift in the form of two small, registered Chester White pigs has been received by the department. The generous party is Chas. Anderson, of Portsmouth, Ohio.

Contestants with hand shears and with hand and power shearing machines will compete with each other at the annual sheep shearing contest to be given under the direction of Prof. Kays at the Judging Pavilion, April 16. There will be six classes, but all arrangements have not been completed. J. W. Hammond, of the Ohio Experiment Station, and H. E. Allen, of Purdue University, have been asked to act as judges.

GOD GIVE US MEN

God give us men. The time demands
 Strong minds, great hearts, true faith and willing
 hands;
 Men whom the lust of office does not kill;
 Men whom the spoils of office cannot buy;
 Men who possess opinions and a will;
 Men who have honor; men who will not lie;
 Men who can stand before a demagogue
 And dam his treacherous flatteries without winking;
 Tall men, sun-crowned, who live above the fog
 In public duty and in private thinking!

—J. G. Holland.

Anniversary Number

THE June issue will complete the twentieth volume of *The Student*. It will contain short articles from the former editors and business managers. This is your chance, old grad, to live over again your campus days. Write and tell us what you are doing, or what some of your classmates are doing. Reciprocate; give the other fellow a chance to read the same kind of news that you like to get yourself. Boost the Twentieth Anniversary Number.

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Friday Evening, April 24th, 7:30 O'Clock—In the Tango, Hesitation, Half and Half, Maxixe, including dips and turns, 50 cents a lesson.

HIGH STREET ACADEMY,

199½ S. High St. Phones: Auto 3456; Main 5877.

Reception nights Mondays and Thursdays.

OAK STREET ACADEMY,

827 Oak St. Phone: Auto 7105.

Tango, Hesitation, Half and Half and Maxixe, Matinee Class Friday afternoon, 2:30 o'clock.

TUITION.

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Ladies, per term of 10 lessons.....	3 00
Private lessons, \$1.00 per lesson; six lessons.....	5 00

The Boston taught by private instruction.

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NEIL AVE. PAVILION—Located on Neil Ave., between Poplar Ave. and Goodale St.—Friday nights. Pavilion plan. Academies and Pavilion can be secured for Private Parties, Club Dances, Fraternity Hops, etc.

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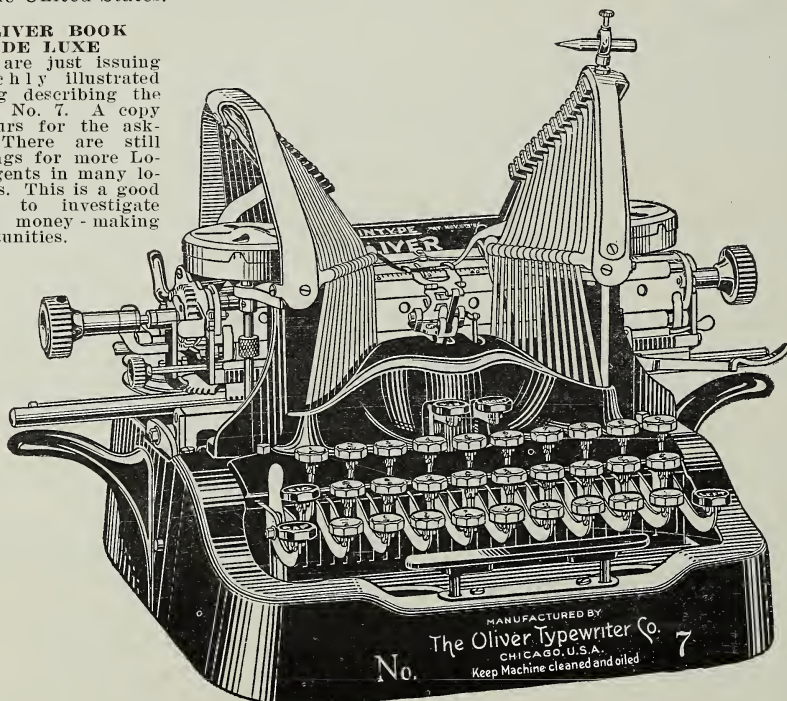
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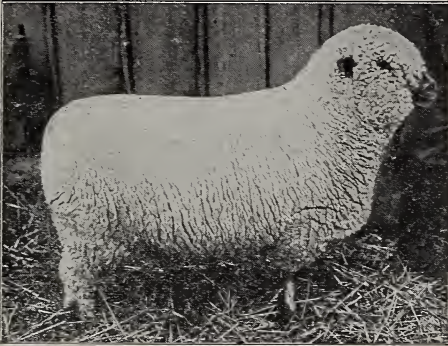
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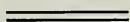
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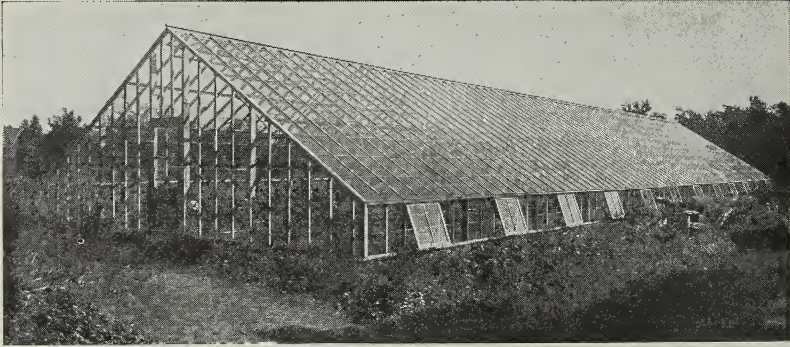
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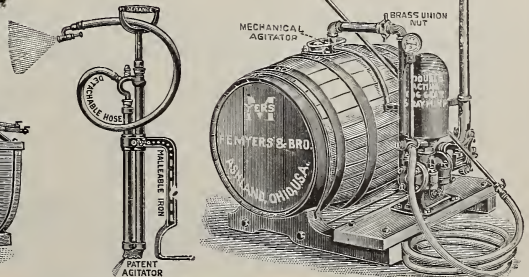
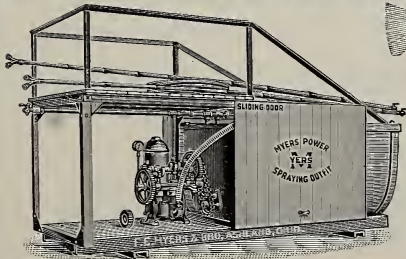
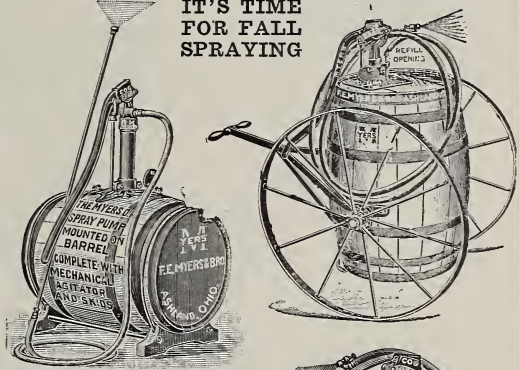
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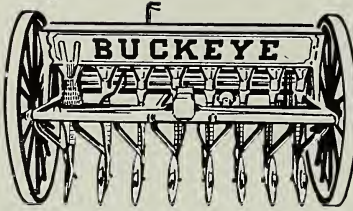
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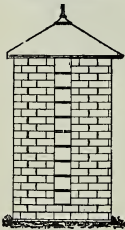
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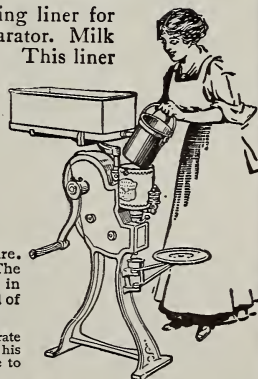
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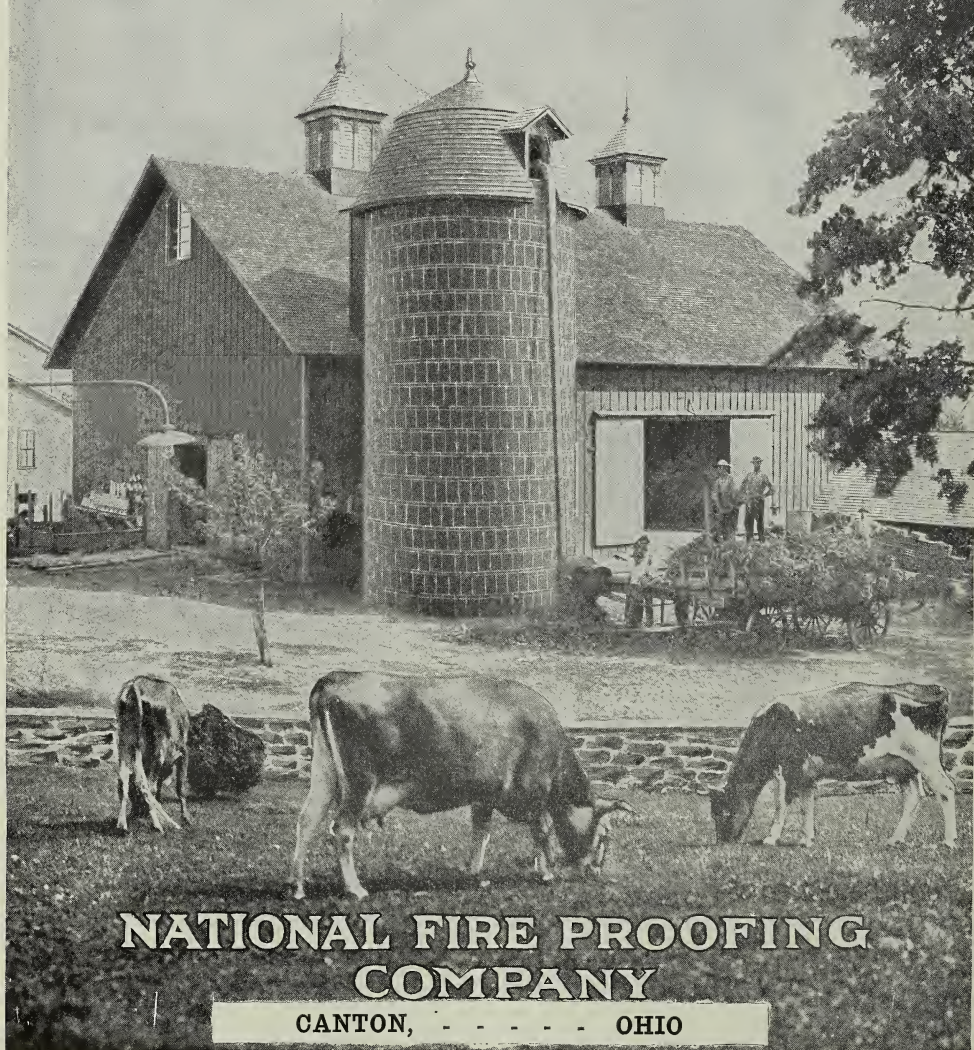
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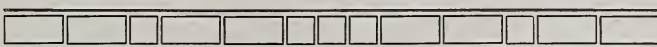
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